

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

LIBRARY ^{'43}
OF THE
UNITED STATES
DEPARTMENT OF AGRICULTURE

Class : 1

Book Ag 87C

350940

Reserve
1918

61ST CONGRESS : : 2D SESSION

1909-1910

HOUSE DOCUMENTS

Vol. 72

WASHINGTON : : GOVERNMENT PRINTING OFFICE : : 1910

DEPARTMENT OF AGRICULTURE

COMBINED REPORT OF

EXPENDITURES DURING THE FISCAL YEAR 1909

APPROPRIATIONS FOR THE FISCAL YEAR 1910

AND

EXPENDITURES PROPOSED FOR THE FISCAL YEAR 1911

AS REQUIRED BY 34 STATUTES, PAGE 1282

PREPARED UNDER THE DIRECTION OF THE SECRETARY OF AGRICULTURE

By A. ZAPPONE

CHIEF OF THE DIVISION OF ACCOUNTS AND DISBURSEMENTS



DECEMBER 20, 1909.—Referred to the Committee on Expenditures in the Department of Agriculture and ordered to be printed

WASHINGTON

GOVERNMENT PRINTING OFFICE

1910

LETTER OF TRANSMITTAL.

DEPARTMENT OF AGRICULTURE, OFFICE OF THE SECRETARY,

Washington, D. C., December 18, 1909.

SIR: As required by 34 Statutes, page 1282, I have the honor to transmit herewith classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909, to which, for purposes of ready comparison, has been added in parallel columns a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910.

A copy of this report has also been transmitted to the President of the Senate.

Very respectfully,

JAMES WILSON,
Secretary.

To the SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TABLE OF CONTENTS.

	Page.
Office of the Secretary.....	5
Buildings, Department of Agriculture.....	9
Weather Bureau.....	10
Bureau of Animal Industry.....	20
Bureau of Plant Industry.....	25
Forest Service.....	112
Bureau of Chemistry.....	142
Bureau of Soils.....	150
Bureau of Entomology.....	163
Bureau of Biological Survey.....	172
Division of Accounts and Disbursements.....	178
Division of Publications.....	180
Bureau of Statistics.....	184
Library.....	191
Office of the Chief Clerk (contingent expenses, Department of Agriculture).....	193
Office of Experiment Stations.....	193
Office of Public Roads.....	206

EXPENDITURES, 1909, APPROPRIATIONS, 1910, AND ESTIMATES, 1911, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910.

OFFICE OF THE SECRETARY.

Detailed expenditures for the fiscal year ended June 30, 1909.			Appropriations for the current fiscal year ending June 30, 1910.		Estimated expenditures for the fiscal year ending June 30, 1911.	
Salaries, Office of the Secretary, 1909, \$133,900.			Salaries, Office of the Secretary, 1910, \$174,570.		Salaries, Office of the Secretary, 1911, \$198,770.	
Wilson, James.....	Secretary of Agriculture, at \$12,000.....	\$12,000.00	Secretary of Agriculture.....	\$12,000.00	Secretary of Agriculture.....	\$12,000.00
Hays, W. M.....	Assistant Secretary of Agriculture, at \$5,000.....	5,000.00	Assistant Secretary of Agriculture..	5,000.00	Assistant Secretary of Agriculture..	5,000.00
McCabe, George P.....	Solicitor, at \$4,000.....	4,000.00	1 solicitor.....	4,500.00	1 solicitor.....	4,500.00
Burch, S. R.....	Chief clerk, at \$2,500, and \$500 additional as custodian of buildings.....	3,000.00	Chief clerk, \$2,500, and \$500 additional as custodian of buildings...	3,000.00	Chief clerk, \$2,500, and \$500 additional as custodian of buildings...	3,000.00
Wilson, Jasper.....	Private secretary of Secretary of Agriculture, at \$2,500.....	2,500.00	Private secretary to the Secretary of Agriculture.....	2,500.00	Private secretary to the Secretary of Agriculture.....	2,500.00
Reese, R. M.....	Stenographer and executive clerk to Secretary, at \$2,000.....	2,000.00	Stenographer and executive clerk to the Secretary of Agriculture.....	2,250.00	Stenographer and executive clerk to the Secretary of Agriculture.....	2,250.00
Mowry, H. H.....	Private secretary to Assistant Secretary, at \$1,600.....	1,600.00	Private secretary to the Assistant Secretary of Agriculture.....	1,600.00	Private secretary to the Assistant Secretary of Agriculture.....	1,600.00
Reynolds, F. A.....	Stenographer to Assistant Secretary, at \$1,400.....	1,400.00	Stenographer to the Assistant Secretary of Agriculture.....	1,400.00	Stenographer to the Assistant Secretary of Agriculture.....	1,400.00
Bennett, J. B.....	Appointment clerk, at \$2,000.....	2,000.00	1 appointment clerk.....	2,000.00	1 appointment clerk.....	2,000.00
Lower, C. B.....	Chief, supply division, at \$2,000.....	2,000.00	1 chief of supply division.....	2,000.00	1 chief of supply division.....	2,000.00
Ashley, Alex McC.....	Inspector, at \$2,000.....	2,000.00	1 inspector.....	2,500.00	1 inspector.....	2,500.00
Guthridge, A. G.....	Telegraph and telephone operator, at \$1,400.....	1,400.00	2 law clerks, at \$2,000 each.....	4,000.00	2 law clerks, at \$2,000 each.....	4,000.00
Daly, H. J.....	Telegraph and telephone operator, at \$1,200.....	1,200.00	3 law clerks, at \$1,600 each.....	4,800.00	3 law clerks, at \$1,600 each.....	4,800.00
Roberts, R. W.....	Clerk, class four.....	1,800.00	1 telegraph and telephone operator.....	1,400.00	1 telegraph and telephone operator.....	1,400.00
Fegan, Hugh J.....	Clerk, class three.....	1,600.00	2 clerks, class four.....	3,600.00	NOTE.—One telegraph and telephone operator at \$1,200 dropped, changed to one mechanic at \$1,200.	
Frickey, Irving.....	Clerk, class three.....	662.22	3 clerks, class three.....	4,800.00	2 clerks, class four.....	3,600.00
Kelsey, F. G.....	Clerk, class three.....	933.34	6 clerks, class two.....	8,400.00	3 clerks, class three.....	4,800.00
Pennybacker, I. S.....	Clerk, class three.....	1,600.00	9 clerks, class one.....	10,800.00	6 clerks, class two.....	8,400.00
Berryhill, Miriam B.....	Clerk, class two.....	1,400.00	7 clerks, at \$1,000 each.....	7,000.00	10 clerks, class one (increase of one by transfer from lump fund of Bureau of Chemistry, now detailed from that bureau).....	12,000.00
Burr, M. Helen.....	Clerk, class two.....	1,400.00	4 clerks, at \$900 each.....	3,600.00	7 clerks, at \$1,000 each.....	7,000.00
Gorman, M. J.....	Clerk, class two.....	700.00	10 clerks, messengers, or skilled laborers, at \$840 each.....	8,400.00	4 clerks, at \$900 each.....	3,600.00
Jones, W. Parker.....	Clerk, class two.....	213.89	8 clerks or laborers, at \$720 each.....	5,760.00	10 clerks, messengers, or skilled laborers, at \$840 each.....	8,400.00
Moore, S. O.....	Clerk, class two.....	486.10	1 chief engineer, who shall be captain of the watch.....	1,600.00	8 clerks or laborers, at \$720 each.....	5,760.00
Haley, Joseph.....	Clerk, class two.....	1,400.00	1 assistant engineer.....	1,400.00	1 chief engineer, who shall be captain of the watch.....	1,600.00
Hiatt, Frank H.....	Clerk, class two.....	1,400.00	2 assistant engineers, at \$1,000 each.....	2,000.00	1 assistant engineer.....	1,400.00
Adams, B. E.....	Clerk, class one.....	400.00	4 firemen, at \$720 each.....	2,880.00	1 engineer (by transfer from statutory roll of Bureau of Chemistry).....	1,200.00
Gorman, M. J.....	Clerk, class one.....	400.00	4 elevator conductors, at \$720 each.....	2,880.00	2 assistant engineers, at \$1,000 each.....	2,000.00
Wilhite, C. O.....	Clerk, class one.....	153.33	1 construction inspector.....	1,200.00	6 firemen, at \$720 each (increase of two by transfer from statutory roll of Publications Division and lump fund of Bureau of Animal Industry).....	4,320.00
Bollinger, Lewis.....	Clerk, class one.....	1,200.00	1 cabinetmaker.....	1,100.00	1 fireman (by transfer from statutory roll of Bureau of Chemistry).....	600.00
Clark, C. B.....	Clerk, class one.....	1,200.00	1 carpenter.....	1,000.00	4 elevator conductors, at \$720 each.....	2,880.00
Green, L. H.....	Clerk, class one.....	1,200.00	1 electrician.....	1,000.00	1 construction inspector.....	1,200.00
Griffith, T. E.....	Clerk, class one.....	500.00	1 electrical wireman.....	900.00	1 cabinetmaker.....	1,100.00
Harrison, Floyd R.....	Clerk, class one.....	700.00	1 painter.....	900.00	2 cabinetmakers, at \$1.080 each (by transfer from lump funds of Bureaus of Animal Industry and Plant Industry).....	2,160.00
Kelsey, F. G.....	Clerk, class one.....	500.00	1 plumber.....	900.00	1 carpenter (by transfer from statutory roll of Bureau of Animal Industry).....	1,000.00
Lourim, J. D.....	Clerk, class one.....	700.00	1 blacksmith.....	840.00	1 carpenter.....	1,000.00
Ray, Thos. J.....	Clerk, class one.....	1,200.00	1 lieutenant of the watch.....	1,000.00	2 carpenters, at \$960 each (by transfer from lump funds of Bureaus of Animal Industry and Chemistry).....	1,920.00
Hines, Paul A.....	Clerk, at \$1,000.....	1,000.00	26 watchmen, at \$720 each.....	18,720.00	5 carpenters, at \$900 each (3 by transfer from statutory roll of Bureau of Animal Industry, one by transfer from statutory roll of Bureau of Plant Industry, and 1 by transfer from lump fund of Office of Experiment Stations).....	4,500.00
Knott, Laura R.....	Clerk, at \$1,000.....	1,000.00	1 mechanic.....	1,200.00	2 carpenters, at \$840 each (by transfer from statutory rolls of Bureaus of Plant Industry and Soils).....	1,680.00
Lewis, Lula.....	Clerk, at \$1,000.....	1,000.00	2 mechanics, at \$1.100 each.....	2,200.00	1 electrician.....	1,000.00
Timberlake, W. F.....	Clerk, at \$1,000.....	1,000.00	6 assistant messengers or skilled laborers, at \$720 each.....	4,320.00	1 electrical wireman.....	900.00
Wasner, W. H.....	Clerk, at \$1,000.....	1,000.00	6 assistant messengers or skilled laborers, at \$600 each.....	3,600.00	2 painters at \$900 each (increase of 1 by transfer from statutory roll of Bureau of Animal Industry).....	1,800.00
Arnold, Mabel.....	Clerk, at \$900.....	900.00	7 laborers, at \$600 each.....	4,200.00	1 painter (by transfer from statutory roll of Bureau of Plant Industry).....	840.00
Breedin, Louise.....	Clerk, at \$900.....	900.00	17 laborers, messenger boys, or charwomen, at \$480 each.....	8,160.00	1 painter.....	720.00
Boree, Burt C.....	Clerk, at \$840.....	245.00	1 charwoman.....	540.00	2 plumbers, at \$900 each (increase of 1 by transfer from lump fund of Chemistry).....	1,800.00
Evans, John P.....	Clerk, at \$840.....	242.67	5 charwomen at \$240 each.....	1,200.00	2 plumbers, at \$840 each (by transfer from statutory roll of Bureau of Plant Industry).....	1,680.00
Tompkins, Robert R.....	Clerk or laborer, at \$720.....	720.00	For extra laborers and emergency employments.....	7,600.00		
Campbell, W. S.....	Clerk or laborer, at \$720.....	420.00				
Dixon, William D.....	Clerk or laborer, at \$720.....	14.00				
Montgomery, John P.....	Clerk or laborer, at \$720.....	284.00				
Morgan, R. H.....	Clerk or laborer, at \$720.....	720.00				
Echtermann, A. M.....	Clerk or laborer, at \$720.....	720.00				
Hicks, Jennie M.....	Clerk or laborer, at \$720.....	194.00				
Watskey, Jake.....	Clerk or laborer, at \$720.....	510.00				
Rapier, J. H.....	Clerk or laborer, at \$720.....	720.00				
Thorpe, J. A.....	Clerk or laborer, at \$720.....	720.00				
Jones, Lewis.....	Chief engineer, at \$1,600.....	1,600.00				
Augusterfer, Raymond.....	Assistant engineer, at \$1,400.....	466.66				
Berlin, Melvin.....	Assistant engineer, at \$1,000.....	233.34				
Corwin, S. Wells.....	Assistant engineer, at \$1,000.....	544.45				
McGregor, John M.....	Fireman, at \$720.....	720.00				
Troy, James D.....	Fireman, at \$720.....	720.00				
Moffitt, A. W.....	Fireman, at \$720.....	720.00				
Ross, W. H.....	Fireman, at \$720.....	720.00				
Tavenner, P. R.....	Fireman, at \$720.....	720.00				
Williams, J. Sherman.....	Elevator conductor, at \$720.....	720.00				
Grant, C. C.....	Elevator conductor, at \$720.....	690.00				
Haardt, H. F.....	Elevator conductor, at \$720.....	720.00				
Newman, H. M.....	Elevator conductor, at \$720.....	720.00				
Ware, Alonzo.....	Cabinetmaker, at \$1,100.....	825.00				
Barghausen, John F.....	Cabinetmaker, at \$1,100.....	275.00				
Halley, James.....	Carpenter, at \$1,000.....	250.00				
Blair, S. C.....	Carpenter, at \$1,000.....	750.00				
Halley, James.....	Electrician, at \$1,000.....	666.67				
Augusterfer, Raymond.....	Painter, at \$900.....	302.78				
Carberry, Thomas F.....		900.00				
Carter, George A.....						
			Total amount of above appropriation (an increase over 1909 of \$41,670).....			
			174,570.00			

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>		<i>Salaries, Office of the Secretary, 1910, \$174,570—Continued.</i>	<i>Salaries, Office of the Secretary, 1911, \$198,770—Continued.</i>
Gutridge, William M.		\$86.00	
Phillips, O. A.	Painter, at \$720.	240.00	
Smith, A. J.		376.00	
Harvey, Charles D.	Plumber, at \$900.	900.00	
Weldman, Charles S.	Blacksmith, at \$840.	840.00	
Cooke, R. H.	Lieutenant of watch, at \$1,000.	1,000.00	
Arnold, Richard H.	Watchman, at \$720.	720.00	
Bean, Clarence.	Watchman, at \$720.	720.00	
Boardman, J. M.	Watchman, at \$720.	720.00	
Byrnes, D. J.	Watchman, at \$720.	720.00	
Fairfax, Thad.	Watchman, at \$720.	720.00	
Gordon, James H.	Watchman, at \$720.	720.00	
Groesbeck, D. V. H.	Watchman, at \$720.	720.00	
Hall, George I.	Watchman, at \$720.	720.00	
Jauch, Daniel.	Watchman, at \$720.	60.00	
Ridgeway, B. T.		570.00	
King, Edmond C.	Watchman, at \$720.	60.00	
Moor, William H.		644.00	
Kite, Asa H.	Watchman, at \$720.	720.00	
Morton, Emory C.	Watchman, at \$720.	720.00	
Phipps, William H.	Watchman, at \$720.	720.00	
Rutledge, Thomas.	Watchman, at \$720.	720.00	
Sprague, Frank.	Watchman, at \$720.	720.00	
Chew, Harry I.		137.49	
Harrison, Martin L.	Mechanic, at \$1,100.	687.50	
Kendrick, H. M.		275.00	
Armstrong, Harry C.	Clerk or messenger, at \$840.	210.00	
Hicks, Jennie M.		613.67	
Brooks, A. H.	Clerk or messenger, at \$840.	840.00	
Gaskins, John H.	Clerk or messenger, at \$840.	840.00	
Hager, Peter.	Clerk or messenger, at \$840.	840.00	
Mason, J. A.	Clerk or messenger, at \$840.	840.00	
Williams, Joseph.	Clerk or messenger, at \$840.	840.00	
Winfield, Alice M.	Clerk or messenger, at \$840.	840.00	
Hawkins, Alfred.	Assistant messenger, at \$720.	270.00	
Morgan, R. H.		436.00	
Priest, John G.	Assistant messenger, at \$720.	390.00	
Tompkins, Robert R.		330.00	
Carter, W. H.	Assistant messenger, at \$600.	300.00	
Smith, C. L.	Assistant messenger, at \$600.	300.00	
Moise, D. O.	Assistant messenger, at \$600.	600.00	
Priest, John G.	Assistant messenger, at \$480.	220.00	
Songtag, K. E.		240.00	
Skidmore, Jared F.	Skilled laborer, at \$840.	840.00	
Richards, William H.	Skilled laborer, at \$720.	699.00	
Grau, E. G.	Skilled laborer, at \$660.	660.00	
Brooks, Charles H.	Skilled laborer, at \$600.	600.00	
Carter, W. H.	Skilled laborer, at \$600.	300.00	
Schwab, Alvin R.	Skilled laborer, at \$600.	300.00	
Graser, S. O.	Skilled laborer, at \$600.	600.00	
Schwab, Alvin R.	Skilled laborer, at \$600.	240.00	
Williams, Max.		240.00	
Syphax, C.	Laborer, at \$600.	495.00	
Truxell, J. M.		105.00	
Anthony, Maria.	Laborer, at \$480.	480.00	
Barnes, C. L.	Laborer, at \$480.	396.00	
Syphax, C.		84.00	
Barrett, Martha.	Laborer, at \$480.	480.00	
Cook, Ida A.	Laborer, at \$480.	480.00	
Cross, M. C.		420.00	
Mason, M.	Laborer, at \$480.	40.00	
Mozee, Willena.		20.00	
Hill, William.	Laborer, at \$480.	480.00	
Kelley, Mary.	Laborer, at \$480.	453.33	
Marshall, Luler.	Laborer, at \$480.	480.00	
Meek, Belle.	Laborer, at \$480.	480.00	
O'Rourke, Estelle L.	Laborer, at \$480.	480.00	
Perkins, Virginia.		390.67	
Schwab, Annie M.	Laborer, at \$480.	40.00	
Simms, Allen.		18.67	
Boss, Martha.	Charwoman, at \$540.	540.00	
Bryant, Addie B.	Charwoman, at \$240.	216.67	
Proise, S. A.		20.00	
DeAtley, Phoebe.	Charwoman, at \$240.	212.67	
Talbott, Lelia M.		20.00	
Garner, Hosanah.	Charwoman, at \$240.	30.00	
Webster, Rosa E.		184.67	
Lawson, Henrietta V.	Charwoman, at \$240.	240.00	
Shannon, Clara.	Charwoman, at \$240.	230.00	
For extra laborers and emergency employments, \$7,600:			
Jones, W. P.	Clerk, class two.	486.10	
Monarch, J. L.	Stenographer and typewriter, at \$1,200.	426.67	
Bennett, A. L.	Messenger, at \$480.	72.00	
Chew, Harry I.	Machinists, at \$4 per diem.	302.00	
Cassell, William A.	Painter, at \$3.50 per diem.	66.50	
Hurdle, Charles W.	Painter, at \$3.50 per diem.	71.75	
Whalen, R. F.	Painter, at \$3.50 per diem.	7.00	
Phillips, Oscar A.	Painter, at \$50 per month.	300.00	
Halloran, Charles E.	Electrician, at \$900.	20.00	
Cox, George E.	Electric wireman, at \$900.	472.50	
McKnew, Nathan G.	Electric wireman, at \$900.	300.00	
Fowler, A. W.	Electrician's helper, at \$3 per diem.	259.50	
Volkmar, R. M.	Electrician's helper, at \$2 per diem.	130.00	
			1 plumber's helper (by transfer from lump fund of Bureau of Animal Industry). \$600.00
			1 blacksmith. 840.00
			1 lieutenant of the watch. 1,000.00
			28 watchmen, at \$720 each (increase of 2 by transfer of money from lump funds of Bureau of Animal Industry and Office of Public Roads). 20,160.00
			2 mechanics, at \$1,200 each (increase of 1 in lieu of 1 telegraph and telephone operator, at \$1,200, dropped) 2,400.00
			2 mechanics, at \$1,100 each. 2,200.00
			8 assistant messengers, or skilled laborers, at \$720 each (increase of 2 by transfer from statutory roll of Bureau of Animal Industry and lump fund of Bureau of Plant Industry). 5,760.00
			7 assistant messengers or skilled laborers, at \$600 each (increase of one by transfer from statutory roll of Bureau of Animal Industry). 4,200.00
			7 laborers, at \$600 each. 4,200.00
			17 laborers, messenger boys, or charwomen, at \$480 each. 8,160.00
			1 charwoman. 540.00
			5 charwomen, at \$240 each. 1,200.00
			For extra laborers and emergency employments. 7,600.00
			Total amount estimated (an increase over 1910 of \$24,200) 198,770.00
			NOTE.—There is an increase in the above appropriation of \$24,200, which is offset by a corresponding reduction in the appropriations of the several bureaus and divisions of the department. \$21,560 is by transfer of mechanics from the several bureaus and divisions of the department for the purpose of consolidating all incidental work and repairs to buildings under the mechanical shop; \$1,440 is for providing two additional watchmen to take care of two buildings to be rented by the Bureau of Animal Industry and the Office of Public Roads, and the money for this purpose has been deducted from the appropriations of those bureaus; \$1,200 is by transfer of one clerk of class one from the lump fund of the Bureau of Chemistry, as the clerk is now detailed to the Secretary's office. Below will be found a list of the employees and the bureaus and appropriations from which transferred.
			Places transferred from the statutory rolls of the following bureaus, and the appropriations of those bureaus reduced accordingly:
			Bureau of Animal Industry:
			1 carpenter. \$1,100
			3 carpenters, at \$900 each. 2,700
			1 painter. 900
			1 skilled laborer. 720
			1 skilled laborer. 600
			6,020
			Bureau of Plant Industry:
			1 carpenter. 900
			1 carpenter. 840
			2 plumbers, at \$840 each. 1,680
			1 painter. 840
			4,260
			Bureau of Chemistry:
			1 engineer. 1,200
			1 fireman. 600
			1,800
			Bureau of Soils:
			1 carpenter. 840
			840
			Division of Publications:
			1 fireman. 720
			720
			Total. 13,640

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>		
For extra laborers and emergency employments, \$7,600—Continued.	<i>Salaries, Office of the Secretary, 1910, \$174,570—Continued.</i>	<i>Salaries, Office of the Secretary, 1911, \$198,770—Continued.</i>
Slaughter, Nugent H.... Electrician's helper, at \$50 per month.....	150.00	
Webb, John E..... Electrician's helper, at \$50 per month.....	450.00	
Brez, Colman..... Mechanic, at \$900.....	105.00	
Long, A. B..... Plumber's helper, at \$2 per diem.....	124.00	
Joyce, John V..... Unskilled laborer, at \$720.....	240.00	
Rouser, Charles E..... Unskilled laborer, at \$720.....	262.00	
Burton, John..... Unskilled laborer, at \$50 per month.....	600.00	
Fitzhugh, William H.... Unskilled laborer, at \$50 per month.....	600.00	
Bundy, E. W..... Unskilled laborer, at \$1.50 per diem.....	405.00	
Butler, Charles J..... Unskilled laborer, at \$1.50 per diem.....	157.50	
Chapman, James E..... Unskilled laborer, at \$1.50 per diem.....	157.50	
Myers, Stanton E..... Unskilled laborer, at \$1.50 per diem.....	157.50	
Simms, Allen..... Unskilled laborer, at \$1.50 per diem.....	136.50	
Smoot, William B..... Unskilled laborer, at \$1.50 per diem.....	132.00	
Stewart, William H.... Unskilled laborer, at \$1.50 per diem.....	157.50	
Toulson, Charles H.... Unskilled laborer, at \$1.50 per diem.....	465.00	
Barnes, Charley Lee.... Unskilled laborer, at \$480.....	84.00	
Truxell, J. M., laborer, at \$600.....	113.33	
Total.....	131,914.98	
Unexpended balance.....	985.02	
Total amount of above appropriation.....	132,900.00	
The above force performed the following duties:		
Administrative and executive:		
Secretary of Agriculture.....	12,000.00	
Assistant Secretary of Agriculture.....	5,000.00	
Chief clerk and custodian of buildings.....	3,000.00	
Private Secretary to the Secretary of Agriculture.....	2,500.00	
Private Secretary to the Assistant Secretary of Agriculture.....	1,600.00	
Stenographer and executive clerk to the Secretary of Agriculture.....	2,000.00	
Stenographer to the Assistant Secretary of Agriculture.....	1,400.00	
1 inspector.....	2,000.00	
1 clerk, class three.....	1,600.00	
2 clerks or messengers, at \$840.....	1,680.00	
1 assistant messenger.....	720.00	
	33,500.00	
Office of the Solicitor:		
1 Solicitor.....	4,000.00	
2 clerks, class four.....	3,600.00	
3 clerks, class three.....	4,800.00	
2 clerks, class two.....	2,800.00	
2 clerks, class one.....	2,400.00	
1 assistant messenger.....	600.00	
	18,200.00	
The above force are performing the following duties:		
Administrative and executive:		
Secretary of Agriculture.....	12,000.00	
Assistant Secretary of Agriculture.....	5,000.00	
Chief clerk and custodian of buildings.....	3,000.00	
Private Secretary to the Secretary of Agriculture.....	2,500.00	
Private Secretary to the Assistant Secretary of Agriculture.....	1,600.00	
Stenographer and executive clerk to the Secretary of Agriculture.....	2,250.00	
Stenographer to the Assistant Secretary of Agriculture.....	1,400.00	
1 inspector.....	2,500.00	
1 clerk, class three.....	1,600.00	
2 messengers, at \$840.....	1,680.00	
1 assistant messenger.....	720.00	
	34,250.00	
Office of the Solicitor:		
1 Solicitor.....	4,500.00	
2 law clerks, at \$2,000.....	4,000.00	
3 law clerks, at \$1,600.....	4,800.00	
1 law clerk.....	1,400.00	
1 clerk, class four.....	1,800.00	
1 clerk, class three.....	1,600.00	
4 clerks, class one.....	4,800.00	
1 assistant messenger.....	720.00	
	23,620.00	
Places transferred from the lump-fund rolls of the following bureaus, and the appropriations of those bureaus reduced accordingly:		
Bureau of Animal Industry:		
1 cabinetmaker.....	\$1,080	
1 carpenter.....	960	
1 fireman.....	720	
1 watchman.....	720	
1 plumber's helper.....	600	
	\$4,080.00	
Bureau of Plant Industry:		
1 cabinetmaker.....	1,080	
1 laborer.....	720	
	1,800.00	
Office of Experiment Stations:		
1 carpenter.....	900	900.00
Bureau of Chemistry:		
1 clerk, class one.....	1,200	
1 carpenter.....	960	
1 plumber.....	900	
	3,060.00	
Office of Public Roads:		
1 watchman.....	720	720.00
Total.....	10,560.00	
Change of title:		
One telegraph and telephone operator, at \$1,200, changed to one mechanic at \$1,200. Net increase, \$24,200.		
NOTE 2.—Salaries of laborers, plumbers, and other emergency employees carried temporarily on the lump fund named below on July 15, 1909:		
2 plumbers, at \$4 per diem each....	2,400.00	
1 cabinetmaker, at \$3.50 per diem..	1,050.00	
1 painter, at \$3.50 per diem.....	1,050.00	
1 blacksmith's helper, at \$2 per diem	600.00	
1 laborer.....	480.00	
4 unskilled laborers, at \$1.50 per diem each.....	1,800.00	
Total.....	7,380.00	
The above force will perform the following duties:		
Administrative and executive:		
Secretary of Agriculture.....	12,000.00	
Assistant Secretary of Agriculture.....	5,000.00	
Chief clerk and custodian of buildings.....	3,000.00	
Private Secretary to the Secretary of Agriculture.....	2,500.00	
Private Secretary to the Assistant Secretary of Agriculture.....	1,600.00	
Stenographer and executive clerk to the Secretary of Agriculture.....	2,250.00	
Stenographer to the Assistant Secretary of Agriculture.....	1,400.00	
1 inspector.....	2,500.00	
1 clerk, class three.....	1,600.00	
2 messengers, at \$840.....	1,680.00	
1 assistant messenger.....	720.00	
	34,250.00	
Office of the Solicitor:		
1 Solicitor.....	4,500.00	
2 law clerks, at \$2,000.....	4,000.00	
3 law clerks, at \$1,600.....	4,800.00	
1 law clerk.....	1,400.00	
1 clerk, class four.....	1,800.00	
1 clerk, class three.....	1,600.00	
4 clerks, class one.....	4,800.00	
1 assistant messenger.....	720.00	
	23,620.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i>	<i>Salaries, Office of the Secretary, 1910, \$174,570—Continued.</i>	<i>Salaries, Office of the Secretary, 1911, \$198,770—Continued.</i>
The above force performed the following duties—Con.	The above force are performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Appointment Division:	Appointment Division:	Appointment Division:
1 Appointment Clerk..... \$2,000.00	1 Appointment Clerk..... \$2,000.00	1 Appointment Clerk..... \$2,000.00
1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00
1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00	1 clerk, class three..... 1,600.00
1 clerk, class two..... 1,400.00	2 clerks, class two..... 2,800.00	2 clerks, class two..... 2,800.00
2 clerks, class one..... 2,400.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
2 clerks, at \$1,000..... 2,000.00	3 clerks, at \$1,000..... 3,000.00	3 clerks, at \$1,000..... 3,000.00
2 clerks, at \$900..... 1,800.00	2 clerks, at \$900..... 1,800.00	2 clerks, at \$900..... 1,800.00
1 clerk..... 840.00	2 assistant messengers, at \$720.. 1,440.00	2 assistant messengers, at \$720.. 1,440.00
1 messenger..... 720.00	1 assistant messenger..... 600.00	1 assistant messenger..... 600.00
1 assistant messenger..... 720.00		
1 assistant messenger..... 480.00		
	16,240.00	16,240.00
15,760.00		
Supply Division:	Supply Division:	Supply Division:
1 Chief of Supply Division..... 2,000.00	1 Chief of Supply Division..... 2,000.00	1 Chief of Supply Division..... 2,000.00
1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
1 clerk, class one..... 1,200.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
1 clerk..... 1,000.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 clerk or messenger..... 840.00	1 clerk..... 720.00	1 clerk..... 720.00
1 clerk or laborer..... 720.00	1 laborer..... 600.00	1 laborer..... 600.00
1 laborer..... 600.00		
	8,120.00	8,120.00
7,760.00		
Post-office:	Post-office:	Post-office:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
1 clerk..... 1,000.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00	1 clerk or laborer..... 720.00
1 skilled laborer..... 660.00	1 assistant messenger..... 600.00	1 assistant messenger..... 600.00
	3,520.00	3,520.00
3,580.00		
File room and time clerks:	File room and time clerks:	Fileroom and time clerks:
1 clerk, class two..... 1,400.00	2 clerks, class two..... 2,800.00	2 clerks, class two..... 2,800.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
2 clerks, at \$1,000..... 2,000.00	2 clerks, at \$1,000..... 2,000.00	2 clerks, at \$1,000..... 2,000.00
1 clerk..... 900.00	2 clerks, at \$840..... 1,680.00	2 clerks, at \$840..... 1,680.00
1 clerk or messenger..... 840.00	1 messenger..... 840.00	1 messenger..... 840.00
1 clerk or laborer..... 720.00		
1 assistant messenger..... 600.00		
	8,520.00	8,520.00
7,660.00		
Telegraph and telephone section:	Telegraph and telephone section:	Telegraph and telephone section:
1 telegraph and telephone operator..... 1,400.00	1 telegraph and telephone operator..... 1,400.00	1 telegraph and telephone operator..... 1,400.00
1 telegraph and telephone operator..... 1,200.00	1 telegraph and telephone operator..... 1,200.00	1 telegraph and telephone operator..... 1,200.00
1 clerk or laborer..... 720.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
1 assistant messenger..... 720.00	1 clerk..... 900.00	1 clerk..... 900.00
	4,900.00	4,900.00
4,040.00		
Engineers, watchmen, messengers, laborers, charwomen, etc.:	Mechanical shop employees, engineers, watchmen, messengers, laborers, charwomen, etc.:	Mechanical shop employees, engineers, watchmen, messengers, laborers, charwomen, etc.:
1 chief engineer..... 1,600.00	1 chief engineer, who shall be captain of the watch..... 1,600.00	1 chief engineer, who shall be captain of the watch..... 1,600.00
1 assistant engineer..... 1,400.00	1 assistant engineer..... 1,400.00	1 assistant engineer..... 1,400.00
2 assistant engineers, at \$1,000..... 2,000.00	2 assistant engineers, at \$1,000..... 2,000.00	1 engineer..... 1,200.00
4 firemen, at \$720..... 2,880.00	4 firemen, at \$720..... 2,880.00	2 assistant engineers, at \$1,000.. 2,000.00
4 elevator conductors, at \$720.. 2,880.00	4 elevator conductors, at \$720.. 2,880.00	6 firemen, at \$720..... 4,320.00
1 electrician..... 1,000.00	1 lieutenant of the watch..... 1,000.00	1 fireman..... 600.00
1 lieutenant of watch..... 1,000.00	26 watchmen, at \$720..... 18,720.00	4 elevator conductors, at \$720.. 2,880.00
15 watchmen, at \$720..... 10,800.00	1 construction inspector..... 1,200.00	1 lieutenant of the watch..... 1,000.00
1 mechanic..... 1,100.00	1 mechanic..... 1,200.00	28 watchmen, at \$720..... 20,160.00
1 skilled laborer..... 840.00	2 mechanics, at \$1,100..... 2,200.00	1 construction inspector..... 1,200.00
3 skilled laborers, at \$600..... 1,800.00	1 cabinetmaker..... 1,100.00	1 mechanic..... 1,200.00
1 skilled laborer..... 480.00	1 carpenter..... 1,000.00	2 mechanics, at \$1,100..... 2,200.00
11 laborers, at \$480..... 5,280.00	1 electrician..... 1,000.00	1 cabinetmaker..... 1,100.00
1 charwoman..... 540.00	1 electrical wireman..... 900.00	2 cabinetmakers, at \$1,080..... 2,160.00
5 charwomen, at \$240..... 1,200.00	1 plumber..... 900.00	1 carpenter..... 1,100.00
	1 painter..... 900.00	1 carpenter..... 1,000.00
	1 painter..... 720.00	2 carpenters, at \$960..... 1,920.00
	1 blacksmith..... 840.00	5 carpenters, at \$900..... 4,500.00
	1 clerk, class one..... 1,200.00	2 carpenters, at \$840..... 1,680.00
	4 clerks, messengers, or laborers, at \$840..... 3,360.00	1 electrician..... 1,000.00
	6 clerks or laborers, at \$720..... 4,320.00	1 electrical wireman..... 900.00
	6 laborers, at \$600..... 3,600.00	2 plumbers, at \$900..... 1,800.00
	2 assistant messengers or skilled laborers, at \$720..... 1,440.00	2 plumbers, at \$840..... 1,680.00
	4 assistant messengers or skilled laborers, at \$600..... 2,400.00	1 plumber's helper..... 600.00
	17 laborers, messenger boys, or charwomen, at \$480..... 8,160.00	2 painters, at \$900..... 1,800.00
	1 charwoman..... 540.00	1 painter..... 840.00
	5 charwomen, at \$240..... 1,200.00	1 painter..... 720.00
		1 blacksmith..... 840.00
		1 clerk, class one..... 1,200.00
		4 clerks, messengers, or laborers, at \$840..... 3,360.00
		6 clerks or laborers, at \$720..... 4,320.00
		6 laborers, at \$600..... 3,600.00
		4 assistant messengers or skilled laborers, at \$720..... 2,880.00
	68,660.00	
Rubber stamp section:		
1 clerk, class one..... 1,200.00		
1 mechanic..... 1,100.00		
2 skilled laborers, at \$720..... 1,440.00		
3,740.00		
Carpenter shop:		
1 cabinetmaker..... 1,100.00		
1 carpenter..... 1,000.00		
2,100.00		
Plumbing shop:		
1 plumber..... 900.00		
1 skilled laborer..... 720.00		
1,620.00		

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of the Secretary—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p><i>Salaries, Office of the Secretary, 1909, \$132,900—Continued.</i></p> <p>The above force performed the following duties—Con.</p> <p>Paint shop:</p> <p>1 painter..... \$900.00</p> <p>1 painter..... 720.00</p> <p>1,620.00</p> <p>Blacksmith shop:</p> <p>1 blacksmith..... 840.00</p> <p>Stable:</p> <p>2 clerks or messengers, at \$840..... 1,680.00</p> <p>1 laborer..... 720.00</p> <p>1 assistant messenger..... 720.00</p> <p>3,120.00</p> <p>NOTE.—The agricultural appropriation act for the fiscal year ending June 30, 1909, provided \$25,000 for the construction of a suitable building for shops, stables, and storage. This building was completed during that fiscal year, and a beginning was made toward assembling therein all of the mechanical shop work of the department.</p>	<p><i>Salaries, Office of the Secretary, 1910, \$174,570—Continued.</i></p> <p>The above force are performing the following duties—Cont'd.</p> <p>NOTE.—During the current fiscal year the plan to assemble all of the mechanical shop work in one building under the supervision of the chief clerk is being continued.</p>	<p><i>Salaries, Office of the Secretary, 1911, \$198,770—Continued.</i></p> <p>The above force will perform the following duties—Cont'd.</p> <p>5 assistant messengers or skilled laborers, at \$600..... \$3,000.00</p> <p>17 laborers, messenger boys, or charwomen, at \$480..... 8,160.00</p> <p>1 charwoman..... 540.00</p> <p>5 charwomen, at \$240..... 1,200.00</p> <p>91,660.00</p> <p>NOTE.—In the estimates for the fiscal year ending June 30, 1911, Congress has been asked to transfer additional employees (mechanics, firemen, watchmen, skilled laborers, etc.) from the rolls of the several bureaus to that of the office of the Secretary, in order to further the department's plan of assembling the mechanical shop work in one building and to place this work under the supervision of the chief clerk. The transfers recommended will increase the roll of the office of the Secretary \$24,200, but this will be an apparent and not a real increase, as the various rolls from which these places are to be transferred will be reduced accordingly.</p>
<p>Details from Secretary's office to various bureaus:</p> <p>1 clerk, class two..... \$1,400.00</p> <p>1 clerk..... 1,000.00</p> <p>1 clerk..... 900.00</p> <p>2 clerks or messengers, at \$840..... 1,680.00</p> <p>4,980.00</p> <p>Extra laborers, emergency employment, and pay of rents..... 7,600.00</p> <p>Total..... 150,920.00</p> <p>NOTE.—Of the above the following were detailed to the office of the Secretary by the various bureaus:</p> <p>2 clerks, class four..... \$3,600.00</p> <p>2 clerks, class three..... 3,200.00</p> <p>1 clerk, class two..... 1,400.00</p> <p>1 clerk, class one..... 1,200.00</p> <p>2 clerks, at \$1,000..... 2,000.00</p> <p>2 clerks, at \$900..... 1,800.00</p> <p>1 clerk or messenger..... 840.00</p> <p>1 messenger..... 720.00</p> <p>1 mechanic..... 1,100.00</p> <p>2 skilled laborers, at \$720..... 1,440.00</p> <p>1 laborer..... 720.00</p> <p>18,020.00</p> <p>132,900.00</p>	<p>Details from Secretary's office to various bureaus:</p> <p>1 clerk..... \$900.00</p> <p>1 clerk..... 840.00</p> <p>\$1,740.00</p> <p>Extra laborers, emergency employment, and pay of rents..... 7,600.00</p> <p>Total..... 177,170.00</p> <p>NOTE.—Of the above the following are detailed to the office of the Secretary by the various bureaus:</p> <p>1 clerk, class two..... \$1,400.00</p> <p>1 clerk, class one..... 1,200.00</p> <p>2,600.00</p> <p>174,570.00</p>	<p>Details from Secretary's office to various bureaus:</p> <p>1 clerk..... \$900.00</p> <p>1 clerk..... 840.00</p> <p>1,740.00</p> <p>Extra laborers, emergency employment, and pay of rents..... 7,600.00</p> <p>Total..... 200,170.00</p> <p>NOTE.—Of the above the following will be detailed to the office of the Secretary by the various bureaus:</p> <p>1 clerk, class two..... 1,400.00</p> <p>198,770.00</p>

BUILDINGS, DEPARTMENT OF AGRICULTURE.

<i>Buildings, Department of Agriculture, \$30,294.33. a</i>	
Salaries in Washington.....	\$1,770.84
Traveling expenses.....	244.69
Miscellaneous expenses and supplies.....	26,928.47
Stationery.....	11.07
Furniture.....	1.75
Freight.....	74.74
Express.....	2.90
Telegraph.....	3.32
Telephone.....	5.45
Total expenditures to August 31, 1909.....	29,043.23
Balance, available until used.....	1,251.10
Total amount of above appropriation.....	a 30,294.33

^a Being the balance of a total appropriation of \$1,500,000 remaining available at the beginning of the fiscal year 1909.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

WEATHER BUREAU.

Detailed expenditures for the fiscal year ended June 30, 1909.			Appropriations for the current fiscal year ending June 30, 1910.		Estimated expenditures for the fiscal year ending June 30, 1911.	
Salaries, Office of Chief of Weather Bureau, \$202,510.			Salaries, Office of Chief of Weather Bureau, \$205,310.		Salaries, Office of Chief of Weather Bureau, \$206,150.	
Moore, Willis L.	Chief of Bureau, at \$5,000.	\$5,000.00	1 Chief of Bureau	\$6,000.00	1 Chief of Bureau	\$6,000.00
Williams, H. E.	Assistant Chief of Bureau, at \$3,000.	3,000.00	1 Assistant Chief of Bureau	3,000.00	1 Assistant Chief of Bureau	3,000.00
Carroll, D. J.	Chief clerk, at \$2,250.	2,250.00	1 chief clerk	2,250.00	1 chief clerk	2,250.00
Church, John P.	Chief of division, at \$2,000.	2,000.00	4 chiefs of division, at \$2,000 each.	8,000.00	4 chiefs of division, at \$2,000 each.	8,000.00
Cleaver, F. M.	Chief of division, at \$2,000.	166.66	1 librarian	2,000.00	1 librarian	2,000.00
Seyboth, Robert.	Chief of division, at \$2,000.	1,833.34	7 clerks, class four.	12,600.00	7 clerks, class four.	12,600.00
Heiskell, Henry L.	Chief of division, at \$2,000.	2,000.00	7 clerks, class three.	11,200.00	7 clerks, class three.	11,200.00
Robinson, J. H.	Chief of division, at \$2,000.	2,000.00	18 clerks, class two.	25,200.00	18 clerks, class two.	25,200.00
Talman, Charles F.	Librarian, at \$2,000.	2,000.00	27 clerks, class one.	32,400.00	27 clerks, class one.	32,400.00
Ashton, John C.	Clerk, class four.	1,650.00	18 clerks, at \$1,000 each.	18,000.00	18 clerks, at \$1,000 each.	18,000.00
Seyboth, Robert.	Clerk, class four.	150.00	9 clerks, at \$900 each.	8,100.00	9 clerks, at \$900 each.	8,100.00
Day, Preston C.	Clerk, class four.	1,800.00	4 copyists or typewriters, at \$840 each.	3,360.00	4 copyists or typewriters, at \$840 each.	3,360.00
Gillam, Frank.	Clerk, class four.	1,350.00	1 copyist or typewriter.	720.00	1 copyist or typewriter.	720.00
Stewart, John C.	Clerk, class four.	450.00	2 assistant foremen of division, at \$1,600 each.	3,200.00	2 assistant foremen of division, at \$1,600 each.	3,200.00
Hunt, George E.	Clerk, class four.	1,800.00	1 proofreader.	1,400.00	1 proofreader.	1,400.00
Jones, J. H.	Clerk, class four.	1,800.00	1 chief mechanic.	1,400.00	1 chief mechanic.	1,400.00
Maring, D. T.	Clerk, class four.	1,800.00	1 lithographer.	1,300.00	1 lithographer.	1,300.00
Ashton, John C.	Clerk, class three.	133.33	3 lithographers, at \$1,200 each.	3,600.00	3 lithographers, at \$1,200 each.	3,600.00
Blundon, Benjamin A.	Clerk, class three.	1,466.67	2 pressmen, at \$1,250 each.	2,500.00	2 pressmen, at \$1,250 each.	2,500.00
Bennett, M. C.	Clerk, class three.	1,600.00	10 compositors, at \$1,250 each.	12,500.00	10 compositors, at \$1,250 each.	12,500.00
Beuter, Sophia A.	Clerk, class three.	400.00	1 skilled mechanic.	1,200.00	1 skilled mechanic.	1,200.00
Stewart, John C.	Clerk, class three.	1,200.00	6 skilled mechanics, at \$1,000 each.	6,000.00	6 skilled mechanics, at \$1,000 each.	6,000.00
Easton, Edward C.	Clerk, class three.	1,600.00	1 engineer.	1,200.00	1 engineer.	1,200.00
Moore, Theodore T.	Clerk, class three.	1,600.00	1 captain of the watch.	1,000.00	1 captain of the watch.	1,000.00
Pugh, T. O.	Clerk, class three.	1,600.00	1 electrician.	1,000.00	1 electrician.	1,000.00
Smith, G. W.	Clerk, class three.	1,600.00	6 skilled artisans, at \$840 each.	5,040.00	6 skilled artisans, at \$840 each.	5,040.00
Abbe, Cleveland, jr.	Clerk, class two.	1,400.00	5 messengers or laborers, at \$720 each.	3,600.00	5 messengers or laborers, at \$720 each.	3,600.00
Beall, S. W.	Clerk, class two.	1,400.00	3 firemen, at \$720 each.	2,160.00	3 firemen, at \$720 each.	2,160.00
Berry, William.	Clerk, class two.	1,400.00	4 watchmen, at \$720 each.	2,880.00	4 watchmen, at \$720 each.	2,880.00
Beuter, Sophia A.	Clerk, class two.	1,050.00	5 folders and feeders, at \$720 each.	3,600.00	5 folders and feeders, at \$720 each.	3,600.00
Gardiner, I. Gwynn.	Clerk, class two.	350.00	3 folders and feeders, at \$630 each.	1,890.00	3 folders and feeders, at \$630 each.	1,890.00
Blundon, Benjamin A.	Clerk, class two.	166.66	6 messengers or laborers, at \$660 each.	3,960.00	6 messengers or laborers, at \$660 each.	3,960.00
Marean, Delzene.	Clerk, class two.	1,283.34	13 messengers, messenger boys, or laborers, at \$600 each.	7,800.00	13 messengers, messenger boys, or laborers, at \$600 each.	7,800.00
Donaldson, William E.	Clerk, class two.	1,400.00	4 messengers, messenger boys, or laborers, at \$480 each.	1,920.00	4 messengers, messenger boys, or laborers, at \$480 each.	1,920.00
Foy, J. T.	Clerk, class two.	1,400.00	5 messengers, messenger boys, or laborers, at \$450 each.	2,250.00	5 messengers, messenger boys, or laborers, at \$450 each.	2,250.00
Geddings, Richard M.	Clerk, class two.	1,400.00	1 charwoman.	360.00	1 charwoman.	360.00
Goucher, Henry.	Clerk, class two.	1,400.00	3 charwomen, at \$240 each.	720.00	3 charwomen, at \$240 each.	720.00
Holmes, Charles.	Clerk, class two.	1,400.00	Total amount of appropriation (an increase over 1909 of \$2,800).....		Total amount estimated (an increase over 1910 of \$840).....	
Johnson, Enoch G.	Clerk, class two.	1,400.00				
Kinnear, Aaron H.	Clerk, class two.	1,400.00	205,310.00		206,150.00	
Monroe, Joseph U.	Clerk, class two.	1,400.00				
Porter, W. D.	Clerk, class two.	1,400.00				
Potter, S. A.	Clerk, class two.	1,400.00				
Smith, H. W.	Clerk, class two.	1,400.00				
Tingley, Franklin G.	Clerk, class two.	1,400.00				
Volker, Hermann.	Clerk, class two.	1,400.00				
Amer, Harry L.	Clerk, class one.	1,190.00				
Dunstan, Edwin V.	Clerk, class one.	10.00				
Ashton, Clinton J.	Clerk, class one.	1,200.00				
Bigham, C. Grant.	Clerk, class one.	1,200.00				
Chapman, Mattie H.	Clerk, class one.	1,200.00				
Cleveland, Luman M.	Clerk, class one.	1,200.00				
Clough, Homer W.	Clerk, class one.	83.33				
Weightman, R. Hanson.	Clerk, class one.	1,113.33				
Cook, James R.	Clerk, class one.	1,200.00				
Cooper, Claude C.	Clerk, class one.	1,200.00				
Crawford, Thomas.	Clerk, class one.	1,200.00				
Edwards, Rowena A.	Clerk, class one.	1,163.33				
Fry, John C.	Clerk, class one.	1,200.00				
Gardiner, I. Gwynn.	Clerk, class one.	900.00				
Pollock, Roswittie E.	Clerk, class one.	300.00				
Hercus, Alice T.	Clerk, class one.	1,200.00				
Hesse, Conrad E.	Clerk, class one.	1,200.00				
Hobbs, Hermann E.	Clerk, class one.	1,200.00				
Hunter, Herbert C.	Clerk, class one.	1,200.00				
Marean, Delzene.	Clerk, class one.	100.00				
Merrill, Herbert C.	Clerk, class one.	1,100.00				
Mattison, E. M.	Clerk, class one.	1,200.00				
Melton, J. H.	Clerk, class one.	1,200.00				
Meston, R. D.	Clerk, class one.	1,200.00				
Minnick, S. Percy.	Clerk, class one.	1,200.00				
Parker, William N.	Clerk, class one.	1,200.00				
Rohrer, Charles W.	Clerk, class one.	1,200.00				
Thompson, Arthur.	Clerk, class one.	1,200.00				
Whiteside, J. L.	Clerk, class one.	1,200.00				
Wilson, Joseph B.	Clerk, class one.	1,200.00				
Young, Frederick A.	Clerk, class one.	1,200.00				
Ackman, George, Jr.	Clerk, at \$1,000.	791.67				
Amer, Harry L.	Clerk, at \$1,000.	8.33				
McGrew, Calvin E.	Clerk, at \$1,000.	194.44				
Barger, Gervase J. P.	Clerk, at \$1,000.	1,000.00				
Diehl, Geneva B.	Clerk, at \$1,000.	1,000.00				
Dugan, Henry P.	Clerk, at \$1,000.	1,000.00				
Emery, Frank D.	Clerk, at \$1,000.	997.22				
Graf, Fred M.	Clerk, at \$1,000.	1,000.00				
Hamrick, Andy M.	Clerk, at \$1,000.	211.11				
Kadel, Benjamin C.	Clerk, at \$1,000.	788.89				
Hawkins, Laura F.	Clerk, at \$1,000.	1,000.00				
Hotze, Ruby S.	Clerk, at \$1,000.	1,000.00				
Johnson, Edward H.	Clerk, at \$1,000.	916.67				
Merrill, Herbert C.	Clerk, at \$1,000.	83.33				
Kincer, Joseph B.	Clerk, at \$1,000.	219.44				
Magrum, Albert F.	Clerk, at \$1,000.	780.56				
Lazenby, Richard O.	Clerk, at \$1,000.	1,000.00				
Miller, Robert L.	Clerk, at \$1,000.	1,000.00				

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$205,310—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$206,150—Continued.</i>
Pollock, Roswille E.....} Clerk, at \$1,000.....{ \$750.00		
Tracy, Anson R.....} Clerk, at \$1,000.....{ 250.00		
Rausch, Gustav E.....} Clerk, at \$1,000.....{ 1,000.00		
Stone, Jesse R.....} Clerk, at \$1,000.....{ 1,000.00		
Weightman, R. Hanson.....} Clerk, at \$1,000.....{ 72.22		
Wiest, Edward S.....} Clerk, at \$1,000.....{ 927.78		
Williamson, Robert M.....} Clerk, at \$1,000.....{ 1,000.00		
Ball, Homer W.....} Clerk, at \$900.....{ 197.50		
Kincer, Joseph B.....} Clerk, at \$900.....{ 637.50		
Wiest, Edward S.....} Clerk, at \$900.....{ 65.00		
Buchanan, Elmer R.....} Clerk, at \$900.....{ 900.00		
Cade, William R.....} Clerk, at \$900.....{ 900.00		
Calvert, Samuel C.....} Clerk, at \$900.....{ 900.00		
Connor, George W.....} Clerk, at \$900.....{ 825.00		
Johnson, Edward H.....} Clerk, at \$900.....{ 75.00		
Driscoll, Michael J.....} Clerk, at \$900.....{ 225.00		
Tracy, Anson R.....} Clerk, at \$900.....{ 675.00		
Hamrick, Andy M.....} Clerk, at \$900.....{ 710.00		
Lyman, Herbert.....} Clerk, at \$900.....{ 190.00		
Long, Mary.....} Clerk, at \$900.....{ 900.00		
Weber, William.....} Clerk, at \$900.....{ 900.00		
Driscoll, Michael J.....} Copyist, at \$840.....{ 630.00		
McClelland, Harold.....} Copyist, at \$840.....{ 207.67		
Dusseault, Joseph A.....} Copyist, at \$840.....{ 37.33		
Lyman, Herbert.....} Copyist, at \$840.....{ 662.67		
Richards, George M.....} Copyist, at \$840.....{ 140.00		
Klock, Margaret E.....} Copyist, at \$840.....{ 571.67		
MacCallen, Lucile F.....} Copyist, at \$840.....{ 70.00		
Swobe, Leon S.....} Copyist, at \$840.....{ 175.00		
Thompson, Alfred R.....} Copyist, at \$840.....{ 840.00		
Peticolas, Virginia M.....} Copyist, at \$720.....{ 720.00		
King, Thomas H.....} Assistant foreman of division, at \$1,600.....{ 1,600.00		
Larcombe, B. F.....} Assistant foreman of division, at \$1,600.....{ 1,600.00		
Winters, L.....} Proof reader, at \$1,400.....{ 1,400.00		
Tuch, C. B.....} Chief mechanic, at \$1,400.....{ 1,400.00		
Long, Samuel C.....} Lithographer, at \$1,300.....{ 1,300.00		
Allen, George.....} Lithographer, at \$1,200.....{ 1,190.00		
Fraber, J. W.....} Lithographer, at \$1,200.....{ 1,200.00		
Keough, W.....} Lithographer, at \$1,200.....{ 1,200.00		
Ackerman, Abram A.....} Pressman, at \$1,250.....{ 1,250.00		
Whitman, Edgar C.....} Pressman, at \$1,250.....{ 1,250.00		
Burns, Charles T.....} Compositor, at \$1,250.....{ 1,250.00		
Buhrman, Oscar H.....} Compositor, at \$1,250.....{ 1,250.00		
Cooper, Robert S.....} Compositor, at \$1,250.....{ 1,250.00		
Emmons, Lucius H.....} Compositor, at \$1,250.....{ 1,229.16		
Estes, Samuel B.....} Compositor, at \$1,250.....{ 1,250.00		
Farrington, W. H.....} Compositor, at \$1,250.....{ 1,250.00		
Green, William B.....} Compositor, at \$1,250.....{ 1,250.00		
Hutchison, James E.....} Compositor, at \$1,250.....{ 1,250.00		
McCallum, Daniel.....} Compositor, at \$1,250.....{ 1,217.02		
von Ostermann, George F.....} Compositor, at \$1,250.....{ 1,250.00		
Claveloux, F. A.....} Skilled mechanic, at \$1,200.....{ 1,200.00		
Balster, John A.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Collins, James F.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Francis, Fred L.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Martin, Julius J.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Newham, Richard S.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Sharp, Stewart S.....} Skilled mechanic, at \$1,000.....{ 1,000.00		
Pilcher, C. H.....} Engineer, at \$1,200.....{ 1,200.00		
Johnson, Hiram.....} Captain of watch, at \$1,000.....{ 1,000.00		
O'Neil, Daniel F.....} Electrician, at \$1,000.....{ 1,000.00		
Chambers, Charles W.....} Skilled artisan, at \$840.....{ 840.00		
Haynes, John M.....} Skilled artisan, at \$840.....{ 840.00		
Hughes, Everett H.....} Skilled artisan, at \$840.....{ 840.00		
Lucas, John H.....} Skilled artisan, at \$840.....{ 644.00		
Smith, Andrew J.....} Skilled artisan, at \$840.....{ 106.18		
Patrick, William.....} Skilled artisan, at \$840.....{ 840.00		
Thornton, Walter S.....} Skilled artisan, at \$840.....{ 840.00		
Brown, Joseph.....} Messenger or laborer, at \$720.....{ 718.00		
Eichelberger, Thomas H.....} Messenger or laborer, at \$720.....{ 720.00		
Feigley, Joseph M.....} Messenger or laborer, at \$720.....{ 610.00		
Wolcott, John W.....} Messenger or laborer, at \$720.....{ 110.00		
Hayes, Michael.....} Messenger or laborer, at \$720.....{ 720.00		
McLane, William, jr.....} Messenger or laborer, at \$720.....{ 720.00		
Barrett, William J.....} Fireman, at \$720.....{ 720.00		
Hudson, James M.....} Fireman, at \$720.....{ 720.00		
Morton, R. H.....} Fireman, at \$720.....{ 720.00		
Bacon, Samuel, jr.....} Watchman, at \$720.....{ 720.00		
Branham, Edward A.....} Watchman, at \$720.....{ 406.00		
Edgerton, Edward S.....} Watchman, at \$720.....{ 106.00		
McClellan, George M.....} Watchman, at \$720.....{ 166.00		
Bryant, William C.....} Watchman, at \$720.....{ 52.00		
Fleckinger, John A.....} Watchman, at \$720.....{ 60.00		
Lavery, Henry.....} Watchman, at \$720.....{ 68.00		
Price, Evan.....} Watchman, at \$720.....{ 390.00		
Wagner, George.....} Watchman, at \$720.....{ 110.00		
Sullivan, John.....} Watchman, at \$720.....{ 720.00		
Carter, Wade H.....} Folder and feeder, at \$720.....{ 680.00		
Jefferson, Wesley W.....} Folder and feeder, at \$720.....{ 40.00		
Ford, Charles B.....} Folder and feeder, at \$720.....{ 720.00		
Fowler, Archibald W.....} Folder and feeder, at \$720.....{ 720.00		
Pruesser, Herman C.....} Folder and feeder, at \$720.....{ 720.00		
Stone, Thad.....} Folder and feeder, at \$720.....{ 720.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p><i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i></p> <p><i>Salaries, Office of Chief of Weather Bureau, \$205,310—Continued.</i></p> <p><i>Salaries, Office of Chief of Weather Bureau, \$206,150—Continued.</i></p>		
<p>Carter, Wade H. \$35.00</p> <p>Keithley, John A. 5.25</p> <p>Moose, Clarence F. 63.87</p> <p>Watt, Frederick J. 525.00</p> <p>Hanke, Clara D. Folder and feeder, at \$630. 630.00</p> <p>Hoagland, Annie E. Folder and feeder, at \$630. 630.00</p> <p>Branham, Edward A. 187.00</p> <p>Brown, Moses H. Messenger or laborer, at \$660. 372.17</p> <p>Feigley, Joseph M. 100.83</p> <p>Butler, Benjamin F. 440.00</p> <p>Tait, Lemuel E. 220.00</p> <p>Holderith, Alois. Messenger or laborer, at \$660. 660.00</p> <p>Plummer, W. Messenger or laborer, at \$660. 660.00</p> <p>Plummer, William, jr. Messenger or laborer, at \$660. 660.00</p> <p>Tracy, Frank T. Messenger or laborer, at \$660. 660.00</p> <p>Allen, Forest W. Messenger, messenger boy, or la- 300.00</p> <p>Brown, Moses H. borer, at \$600. 261.67</p> <p>Hartshorn, George E. 31.67</p> <p>Bassinger, Henry C. 231.67</p> <p>Butler, Benjamin F. Messenger, messenger boy, or la- 200.00</p> <p>Elliott, John L. borer, at \$600. 28.33</p> <p>Russell, Paul G. 21.67</p> <p>Tait, Lemuel E. 115.00</p> <p>Branham, E. A. Messenger, messenger boy, or la- 91.67</p> <p>Coe, Edmund G. borer, at \$600. 508.33</p> <p>Flickinger, John A. Messenger, messenger boy, or la- 44.00</p> <p>Lee, Jesse B. borer, at \$600. 550.00</p> <p>Gardiner, F. Gwynn. Messenger, messenger boy, or la- 600.00</p> <p>borer, at \$600. 600.00</p> <p>Glover, George J. Messenger, messenger boy, or la- 600.00</p> <p>borer, at \$600. 150.00</p> <p>Harris, Robert. Messenger, messenger boy, or la- 450.00</p> <p>Stepp, John W. borer, at \$600. 435.00</p> <p>Laskowski, Bernard R. Messenger, messenger boy, or la- 165.00</p> <p>Rhea, William E. borer, at \$600. 325.00</p> <p>McCreight, John H. Messenger, messenger boy, or la- 275.00</p> <p>Peirce, Kenneth R. borer, at \$600. 600.00</p> <p>McDermott, Edward. Messenger, messenger boy, or la- 600.00</p> <p>borer, at \$600. 600.00</p> <p>Patrick, Thomas. Messenger, messenger boy, or la- 600.00</p> <p>borer, at \$600. 400.00</p> <p>Turner, Linwood. Messenger, messenger boy, or la- 200.00</p> <p>Williams, Max. borer, at \$600. 73.33</p> <p>Washington, Rudolph. Messenger, messenger boy, or la- 286.67</p> <p>borer, at \$600. 120.00</p> <p>Coe, Edmund G. Messenger, messenger boy, or la- 480.00</p> <p>Harris, Robert. borer, at \$480. 480.00</p> <p>Stepp, John W. Messenger, messenger boy, or la- 220.00</p> <p>Lee, Plato T. borer, at \$480. 100.00</p> <p>Mankin, Le Roy T. Messenger, messenger boy, or la- 160.00</p> <p>borer, at \$480. 2.50</p> <p>McCreight, John H. Messenger, messenger boy, or la- 85.00</p> <p>Peirce, Kenneth R. borer, at \$480. 150.00</p> <p>Turner, Linwood. 75.00</p> <p>Anderson, Ernest E. 97.50</p> <p>Barbour, Arnold W. Messenger, messenger boy, or la- 131.25</p> <p>Peirce, Kenneth R. borer, at \$450. 208.75</p> <p>Williams, Max. 117.50</p> <p>Yancy, Benjamin E. 68.75</p> <p>Bugden, Arthur J. Messenger, messenger boy, or la- 381.25</p> <p>Goepfert, Paul J. borer, at \$450. 102.50</p> <p>Primm, Paul H. 341.25</p> <p>Harris, Robert. Messenger, messenger boy, or la- 450.00</p> <p>Miller, Erskine R. borer, at \$450. 360.00</p> <p>Keller, David. Messenger, messenger boy, or la- 240.00</p> <p>Welty, John F. borer, at \$450. 240.00</p> <p>Muller, Paul H. Messenger, messenger boy, or la- 240.00</p> <p>borer, at \$450. 240.00</p> <p>Lomax, Amanda. Charwoman, at \$360. 240.00</p> <p>Crabbs, Lydia M. Charwoman, at \$240. 240.00</p> <p>Payne, Lucy. Charwoman, at \$240. 240.00</p> <p>Templeton, Clara A. Charwoman, at \$240. 240.00</p>	<p>Expenditures up to August 31, 1909. 202,142.73</p> <p>Balance to be turned back into Treasury. 367.27</p> <p>Total amount of appropriation. 202,510.00</p> <p>The above force performed the following duties:</p> <p>Accounts division (charge of the accounts of the Weather Bureau, including the leasing of offices and the construction and repair of buildings outside of Washington):</p> <p>*1 assistant chief, division of accounts. 2,500.00</p> <p>2 clerks, at \$1,800 each. 3,600.00</p> <p>3 clerks, at \$1,400 each. 4,200.00</p> <p>3 clerks, at \$1,200 each. 3,600.00</p> <p>2 clerks, at \$1,000 each. 2,000.00</p> <p>*1 assistant observer. 1,000.00</p> <p>1 clerk. 900.00</p> <p>1 copyist. 840.00</p> <p>1 messenger. 660.00</p> <p>19,300.00</p>	<p>The above force will perform the following duties:</p> <p>Accounts division:</p> <p>*1 assistant chief, division of accounts. \$2,500.00</p> <p>2 clerks, at \$1,800 each. 3,600.00</p> <p>3 clerks, at \$1,400 each. 4,200.00</p> <p>4 clerks, at \$1,200 each. 4,800.00</p> <p>1 clerk. 1,000.00</p> <p>*1 assistant observer. 1,000.00</p> <p>1 clerk. 900.00</p> <p>1 copyist. 840.00</p> <p>1 messenger. 660.00</p> <p>19,500.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$205,310—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$206,150—Continued.</i>
The above force performed the following duties—Con.	The above force are performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Administration:	Administration:	Administration:
1 chief of bureau..... \$5,000.00	1 chief of bureau..... \$6,000.00	1 chief of bureau..... \$6,000.00
1 assistant chief of bureau..... 3,000.00	1 assistant chief of bureau..... 3,000.00	1 assistant chief of bureau..... 3,000.00
1 chief clerk..... 2,250.00	1 chief clerk..... 2,250.00	1 chief clerk..... 2,250.00
1 clerk..... 1,800.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
4 clerks, at \$1,600 each..... 6,400.00	4 clerks, at \$1,600 each..... 6,400.00	4 clerks, at \$1,600 each..... 6,400.00
2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00
4 clerks, at \$1,200 each..... 4,800.00	4 clerks, at \$1,200 each..... 4,800.00	4 clerks, at \$1,200 each..... 4,800.00
2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
2 clerks, at \$900 each..... 1,800.00	2 clerks, at \$900 each..... 1,800.00	2 clerks, at \$900 each..... 1,800.00
1 messenger..... 660.00	1 messenger..... 660.00	1 messenger..... 660.00
1 messenger..... 600.00	1 messenger..... 600.00	1 messenger..... 600.00
31,110.00	32,110.00	32,110.00
Climatological division (supervision of the observations taken by cooperative observers located in nearly every county in the United States, the printing of the climatic data that are collected, and the collection and distribution of special observations made in the cotton, corn, wheat, and fruit sections of the United States during the crop-growing season):	Climatological division:	Climatological division:
*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00	*1 professor of meteorology, in charge of division..... 3,000.00
1 clerk..... 1,800.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
1 clerk..... 1,400.00	1 clerk..... 1,400.00	1 clerk..... 1,400.00
3 clerks, at \$1,200 each..... 3,600.00	3 clerks, at \$1,200 each..... 3,600.00	3 clerks, at \$1,200 each..... 3,600.00
2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
*1 assistant observer..... 1,000.00	*1 assistant observer..... 1,000.00	*1 assistant observer..... 1,000.00
2 clerks, at \$900 each..... 1,800.00	2 clerks, at \$900 each..... 1,800.00	2 clerks, at \$900 each..... 1,800.00
*1 assistant observer..... 840.00	*1 assistant observer..... 840.00	*1 assistant observer..... 840.00
1 copyist..... 720.00	1 copyist..... 720.00	1 copyist..... 720.00
1 messenger..... 600.00	1 messenger..... 600.00	1 messenger..... 600.00
16,760.00	15,920.00	15,920.00
Distributing division (charge of the checking and compiling of meteorological data):	Distributing division:	Distributing division:
*1 chief of division..... 2,750.00	*1 chief of division..... 2,750.00	*1 chief of division..... 2,750.00
1 clerk..... 1,600.00	1 clerk..... 1,600.00	1 clerk..... 1,600.00
1 clerk..... 1,400.00	1 clerk..... 1,400.00	1 clerk..... 1,400.00
4 clerks, at \$1,200 each..... 4,800.00	4 clerks, at \$1,200 each..... 4,800.00	4 clerks, at \$1,200 each..... 4,800.00
3 clerks, at \$1,000 each..... 3,000.00	3 clerks, at \$1,000 each..... 3,000.00	3 clerks, at \$1,000 each..... 3,000.00
1 laborer..... 720.00	1 laborer..... 720.00	1 laborer..... 720.00
1 messenger boy..... 600.00	1 messenger boy..... 600.00	1 messenger boy..... 600.00
14,870.00	14,870.00	14,870.00
Editorial work (the preparation of the Monthly Weather Review, which contains the weather records for the United States for the month for which it is issued, and special contributions pertaining to meteorological subjects):	Editorial work:	Editorial work:
*1 professor of meteorology..... 2,500.00		
1 clerk..... 1,400.00	1 clerk..... 1,400.00	1 clerk..... 1,400.00
3,900.00		
Forecast division (supervision of the forecast and warning work of the entire bureau):	Forecast division:	Forecast division:
*1 professor of meteorology in charge of division..... 3,000.00	*1 professor of meteorology in charge of division..... 3,000.00	*1 professor of meteorology in charge of division..... 3,000.00
1 clerk..... 1,800.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
3 clerks, at \$1,400 each..... 4,200.00	*1 district forecaster..... 2,400.00	*1 district forecaster..... 2,400.00
3 clerks, at \$1,200 each..... 3,600.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
2 clerks, at \$1,000 each..... 2,000.00	1 clerk..... 1,600.00	1 clerk..... 1,600.00
1 copyist..... 840.00	2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00
*9 assistant observers, at \$720 each..... 6,480.00	3 clerks, at \$1,200 each..... 3,600.00	3 clerks, at \$1,200 each..... 3,600.00
21,920.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
	1 copyist..... 840.00	1 copyist..... 840.00
	*9 assistant observers, at \$720 each..... 6,480.00	
	24,520.00	18,040.00
Instrument division (charge of the designing, manufacture, repair, selection, and issuing of instruments and apparatus used throughout the service):	Instrument division:	Instrument division:
*1 professor of meteorology in charge of division..... 3,000.00	*1 professor of meteorology in charge of division..... 3,000.00	*1 professor of meteorology in charge of division..... 3,000.00
1 clerk..... 1,800.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00	2 clerks, at \$1,400 each..... 2,800.00
1 chief mechanic..... 1,400.00	1 chief mechanic..... 1,400.00	1 chief mechanic..... 1,400.00
1 skilled mechanic..... 1,200.00	1 skilled mechanic..... 1,200.00	1 skilled mechanic..... 1,200.00
2 skilled mechanics, at \$1,000 each..... 2,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00	2 skilled mechanics, at \$1,000 each..... 2,000.00
2 messengers, at \$600 each..... 1,200.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
13,400.00	2 messengers, at \$600 each..... 1,200.00	2 messengers, at \$600 each..... 1,200.00
	14,400.00	14,400.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>		
The above force performed the following duties—Con.		
Library (contains over 30,000 volumes and pamphlets pertaining to meteorological subjects. The librarian is also the supervising examiner):		
1 librarian.....	1 librarian.....	1 librarian.....
1 clerk.....	1 clerk.....	1 clerk.....
1 clerk.....	1 clerk.....	1 clerk.....
1 messenger boy.....	1 messenger boy.....	1 messenger boy.....
4,650.00	4,650.00	4,650.00
Marine division (charge of the collection and issuing of marine meteorological data, the correction of barometers for vessel captains, and the preparation and distribution of marine information):		
1 chief of division.....	1 chief of division.....	1 chief of division.....
1 clerk.....	2 clerks, at \$1,400 each.....	2 clerks, at \$1,400 each.....
4 clerks, at \$1,200 each.....	3 clerks, at \$1,200 each.....	3 clerks, at \$1,200 each.....
2 clerks, at \$1,000 each.....	2 clerks, at \$1,000 each.....	2 clerks, at \$1,000 each.....
3 clerks, at \$900 each.....	3 clerks, at \$900 each.....	3 clerks, at \$900 each.....
2 copyists, at \$840 each.....	2 copyists, at \$840 each.....	2 copyists, at \$840 each.....
1 messenger boy.....	1 messenger boy.....	1 messenger boy.....
15,180.00	15,380.00	15,380.00
Mechanical work (carpentry, electrical, and miscellaneous mechanical work required about the buildings and grounds):		
1 engineer.....	1 engineer.....	1 engineer.....
2 skilled mechanics, at \$1,000 each.....	2 skilled mechanics, at \$1,000 each.....	2 skilled mechanics, at \$1,000 each.....
1 electrician.....	1 electrician.....	1 electrician.....
4 skilled artisans, at \$840 each.....	4 skilled artisans, at \$840 each.....	4 skilled artisans, at \$840 each.....
3 firemen, at \$720 each.....	*1 gardener.....	1 gardener.....
	3 firemen, at \$720 each.....	3 firemen, at \$720 each.....
9,720.00	10,560.00	10,560.00
Captain of the watch and messenger and labor service:		
1 clerk.....	1 clerk.....	1 clerk.....
1 captain of the watch.....	1 captain of the watch.....	1 captain of the watch.....
1 skilled artisan.....	1 skilled artisan.....	1 skilled artisan.....
1 messenger.....	1 messenger.....	1 messenger.....
2 laborers, at \$720 each.....	2 laborers, at \$720 each.....	2 laborers, at \$720 each.....
4 watchmen, at \$720 each.....	4 watchmen, at \$720 each.....	4 watchmen, at \$720 each.....
2 laborers, at \$660 each.....	2 laborers, at \$660 each.....	2 laborers, at \$660 each.....
1 messenger boy.....	1 messenger boy.....	1 messenger boy.....
5 laborers, at \$600 each.....	5 laborers, at \$600 each.....	5 laborers, at \$600 each.....
2 messengers, at \$480 each.....	2 messengers, at \$480 each.....	2 messengers, at \$480 each.....
2 messenger boys, at \$450 each.....	2 messenger boys, at \$450 each.....	2 messenger boys, at \$450 each.....
1 charwoman.....	1 charwoman.....	1 charwoman.....
3 charwomen, at \$240 each.....	3 charwomen, at \$240 each.....	3 charwomen, at \$240 each.....
15,740.00	15,740.00	15,740.00
Publications Division (charge of the printing of weather maps, bulletins, forms, Monthly Weather Review, and other publications):		
1 chief of division.....	1 chief of division.....	1 chief of division.....
2 assistant foremen of division, at \$1,600 each.....	2 assistant foremen of division, at \$1,600 each.....	2 assistant foremen of division, at \$1,600 each.....
1 proof reader.....	1 proof reader.....	1 proof reader.....
1 lithographer.....	1 lithographer.....	1 lithographer.....
10 compositors, at \$1,250 each.....	10 compositors, at \$1,250 each.....	10 compositors, at \$1,250 each.....
2 pressmen, at \$1,250 each.....	2 pressmen, at \$1,250 each.....	2 pressmen, at \$1,250 each.....
3 lithographers, at \$1,200 each.....	3 lithographers, at \$1,200 each.....	3 lithographers, at \$1,200 each.....
1 clerk.....	1 clerk.....	1 clerk.....
1 skilled mechanic.....	1 skilled mechanic.....	1 skilled mechanic.....
1 skilled artisan.....	1 skilled artisan.....	1 skilled artisan.....
5 folders and feeders, at \$720 each.....	5 folders and feeders, at \$720 each.....	5 folders and feeders, at \$720 each.....
1 messenger.....	1 messenger.....	1 messenger.....
1 laborer.....	1 laborer.....	1 laborer.....
4 folders and feeders, at \$630 each.....	3 folders and feeders, at \$630 each.....	3 folders and feeders, at \$630 each.....
1 laborer.....	1 laborer.....	1 laborer.....
1 messenger.....	1 messenger.....	1 messenger.....
38,120.00	37,490.00	37,490.00
River and flood service (charge of river and flood work):		
*1 professor of meteorology, in charge of service.....	*1 professor of meteorology, in charge of service.....	*1 professor of meteorology, in charge of service.....
1 clerk.....	1 clerk.....	1 clerk.....
4,000.00	4,000.00	4,000.00
Supplies division (charge of the purchasing and issuing of supplies):		
1 chief of division.....	1 chief of division.....	1 chief of division.....
1 clerk.....	1 clerk.....	1 clerk.....
1 clerk.....	1 clerk.....	1 clerk.....
3 clerks, at \$1,200 each.....	3 clerks, at \$1,200 each.....	3 clerks, at \$1,200 each.....
1 skilled mechanic.....	1 skilled mechanic.....	1 skilled mechanic.....
1 laborer.....	1 laborer.....	1 laborer.....
1 messenger boy.....	1 messenger boy.....	1 messenger boy.....
10,710.00	10,710.00	10,710.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of Chief of Weather Bureau, \$202,510—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$205,310—Continued.</i>	<i>Salaries, Office of Chief of Weather Bureau, \$206,150—Continued.</i>
The above force performed the following duties—Con.	The above force are performing the following duties—Cont'd.	The above force will perform the following duties—Cont'd.
Telegraph Division (charge of the maintenance and repair of telegraph lines owned by the Weather Bureau, and the transmission and checking of all telegraph and telephone messages. Seven of the clerks in this division are also skilled operators, who daily receive and transmit the messages, reports, etc., required in the forecast and warning work at Washington):	Telegraph Division:	Telegraph Division:
1 chief of division..... \$2,000.00	1 chief of division..... \$2,000.00	1 chief of division..... \$2,000.00
1 clerk..... 1,600.00	1 clerk..... 1,800.00	1 clerk..... 1,800.00
3 clerks, at \$1,400 each..... 4,200.00	3 clerks, at \$1,400 each..... 4,200.00	3 clerks, at \$1,400 each..... 4,200.00
1 clerk..... 1,200.00	1 clerk..... 1,200.00	1 clerk..... 1,200.00
2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
1 clerk..... 900.00	1 clerk..... 900.00	1 clerk..... 900.00
1 messenger boy..... 480.00	1 messenger boy..... 480.00	1 messenger boy..... 480.00
1 messenger boy..... 450.00	1 messenger boy..... 450.00	1 messenger boy..... 450.00
12,830.00	13,030.00	13,030.00
Total..... 232,210.00	Total..... 234,280.00	Total..... 227,800.00
*Paid from "Salaries, station employees, Weather Bureau"..... 26,570.00	*Paid from "General expenses, Weather Bureau"..... 26,470.00	*Paid from "General expenses, Weather Bureau"..... 19,150.00
*Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00	*Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00	Paid from "Salaries, Division of Accounts and Disbursements"..... 2,500.00
†One employee paid from "General expenses, Weather Bureau"..... 630.00		
29,700.00	28,970.00	21,650.00
<i>Fuel, lights, and repairs, Weather Bureau, \$10,000.</i>	<i>Contingent expenses, Weather Bureau, \$35,000.</i>	<i>Contingent expenses, Weather Bureau, \$25,000.</i>
Fuel..... \$2,906.97	Fuel..... \$3,800.00	Fuel..... \$3,800.00
Gas..... 335.70	Gas..... 335.00	Gas..... 335.00
Hauling ashes, rubbish, etc..... 137.00	Hauling ashes, rubbish, etc..... 150.00	Hauling ashes, rubbish, etc..... 150.00
Rent of fire-alarm boxes..... 50.00	Rent of fire-alarm boxes..... 50.00	Rent of fire-alarm boxes..... 50.00
Repairs to buildings and care of grounds..... 5,746.95	Repairs to buildings and care of grounds..... 5,605.00	Repairs to buildings and care of grounds..... 7,000.00
Total expenditures to August 31, 1909..... 9,176.62	Engine generator, and repairs to heating plant..... 4,000.00	Stationery, blank books, etc..... 1,800.00
Outstanding liabilities on August 31, 1909..... 684.13	Stationery, blank books, etc..... 1,800.00	Miscellaneous supplies..... 6,500.00
Balance to be turned back into Treasury..... 139.25	Miscellaneous supplies..... 4,330.00	Furniture, carpets, etc..... 2,000.00
Total amount of appropriation..... 10,000.00	Furniture, carpets, etc..... 1,800.00	Freight and express..... 200.00
<i>Contingent expenses, Weather Bureau, \$11,000.</i>	Rent of telephones, etc..... 625.00	Rent of telephones, etc..... 625.00
Stationery, blank books, etc..... \$1,548.24	Freight and express..... 200.00	Apparatus, instruments, laboratory material, etc..... 880.00
Miscellaneous supplies..... 5,246.54	Apparatus, instruments, laboratory material, etc..... 880.00	Forage..... 425.00
Furniture, carpets, etc..... 1,850.34	Forage..... 425.00	Purchase of and repairs to wagons, harness, etc..... 835.00
Freight and express..... 152.95	Purchase of and repairs to wagons, harness, etc..... 600.00	Ice..... 300.00
Rent of telephones, etc..... 586.69	Ice..... 300.00	Washing towels..... 100.00
Apparatus, instruments, laboratory material, etc..... 216.00	Washing towels..... 100.00	
Forage..... 415.20	Total amount of appropriation (an increase over 1909 of \$4,000)..... 25,000.00	Total amount estimated (no increase over 1910)..... 25,000.00
Repairs to wagons, harness, etc..... 192.70	NOTE.—"Fuel, lights, and repairs," combined with "Contingent expenses."	
Ice..... 275.56		
Washing towels..... 80.04		
Total expenditures to August 31, 1909..... 10,564.26		
Outstanding liabilities on August 31, 1909..... 133.08		
Balance to be turned back into Treasury..... 302.66		
Total amount of appropriation..... 11,000.00		
<i>Salaries, station employees, Weather Bureau, \$586,750.</i>	<i>General expenses, Weather Bureau, \$1,277,950</i>	<i>General expenses, Weather Bureau, \$1,277,110.</i>
In Washington:	In Washington:	In Washington:
5 professors of meteorology, at \$3,000 each..... \$14,500.00	4 professors of meteorology, at \$3,000 each..... \$12,000.00	4 professors of meteorology, at \$3,000 each..... \$12,000.00
1 chief, Distributing Division..... 2,750.00	1 chief, Distributing Division..... 2,750.00	1 chief, Distributing Division..... 2,750.00
1 clerk, at \$1,200..... 100.00	1 district forecaster..... 2,400.00	1 district forecaster..... 2,400.00
1 printer, at \$1,000..... 13.89	2 assistant observers, at \$1,000 each..... 2,000.00	2 assistant observers, at \$1,000 each..... 2,000.00
1 assistant observer, at \$840..... 247.33	1 gardener..... 840.00	1 folder and feeder..... 630.00
20 assistant observers, at \$720 each..... 3,640.00	9 assistant observers, at \$720 each..... 6,480.00	
21,251.22	1 folder and feeder..... 630.00	19,780.00
	27,100.00	
Out of Washington—	Salaries at regular stations out of Washington—	Salaries at regular stations out of Washington—
1 professor of meteorological physics..... 3,000.00	1 professor of meteorological physics..... 3,000.00	1 professor of meteorological physics..... 3,000.00
3 professors of meteorology, at \$3,000 each..... 9,000.00	3 professors of meteorology, at \$3,000 each..... 9,000.00	3 professors of meteorology, at \$3,000 each..... 9,000.00
2 professors of meteorology, at \$2,500 each..... 2,916.67	2 professors of meteorology, at \$2,500 each..... 5,000.00	2 professors of meteorology, at \$2,500 each..... 5,000.00
2 inspectors, at \$2,500 each..... 5,000.00	2 inspectors, at \$2,500 each..... 5,000.00	2 inspectors, at \$2,500 each..... 5,000.00
7 district forecasters, at \$2,400 each..... 16,433.33	7 district forecasters, at \$2,400 each..... 16,800.00	7 district forecasters, at \$2,400 each..... 16,800.00
1 research director..... 2,000.00	1 research director..... 2,000.00	1 research director..... 2,000.00
2 research observers, at \$1,400 each..... 2,800.00	1 research observer..... 1,400.00	1 research observer..... 1,400.00
3 local forecasters, at \$2,000 each..... 6,000.00	5 local forecasters, at \$2,000 each..... 10,000.00	5 local forecasters, at \$2,000 each..... 10,000.00
7 local forecasters, at \$1,800 each..... 12,600.00		
13 local forecasters, at \$1,600 each..... 20,434.44		
35 local forecasters, at \$1,400 each..... 47,826.67		
6 section directors, at \$2,000 each..... 11,583.34		

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.		Estimated expenditures for the fiscal year ending June 30, 1911.	
<i>Salaries, station employees, Weather Bureau, \$586,750—Continued.</i>		<i>General expenses, Weather Bureau, \$1,277,950—Continued.</i>		<i>General expenses, Weather Bureau, \$1,277,110—Continued.</i>	
Out of Washington—Continued.		Salaries at regular stations out of Washington—Continued.		Salaries at regular stations out of Washington—Continued.	
11 section directors, at \$1,800 each	\$18,215.00	6 local forecasters, at \$1,800 each	\$10,800.00	6 local forecasters, at \$1,800 each	\$10,800.00
10 section directors, at \$1,600 each	15,999.99	13 local forecasters, at \$1,600 each	20,800.00	13 local forecasters, at \$1,600 each	20,800.00
12 section directors, at \$1,400 each	14,146.11	35 local forecasters, at \$1,400 each	49,000.00	35 local forecasters, at \$1,400 each	49,000.00
1 section director	1,000.00	2 local forecasters, at \$1,000 each	2,000.00	2 local forecasters, at \$1,000 each	2,000.00
101 observers, at \$1,200 each	121,092.73	1 local forecaster	900.00	1 local forecaster	900.00
85 assistant observers, at \$1,000 each	84,532.83	5 section directors, at \$2,000 each	10,000.00	5 section directors, at \$2,000 each	10,000.00
79 assistant observers, at \$840 each	61,161.66	13 section directors, at \$1,800 each	23,400.00	13 section directors, at \$1,800 each	23,400.00
34 assistant observers, at \$720 each	9,863.00	7 section directors, at \$1,600 each	11,200.00	7 section directors, at \$1,600 each	11,200.00
1 operator, at \$1,200	1,113.89	14 section directors, at \$1,400 each	19,600.00	14 section directors, at \$1,400 each	19,600.00
1 expert in vessel reporting	840.00	1 section director	1,000.00	1 section director	1,000.00
13 printers, at \$1,200 each	15,300.00	101 observers, at \$1,200 each	121,200.00	101 observers, at \$1,200 each	121,200.00
16 printers, at \$1,000 each	12,575.52	80 assistant observers, at \$1,000 each	80,000.00	80 assistant observers, at \$1,000 each	80,000.00
1 skilled mechanic	1,200.00	66 assistant observers, at \$840 each	55,440.00	66 assistant observers, at \$840 each	55,440.00
2 repairmen, at \$840 each	865.67	31 assistant observers, at \$720 each	22,320.00	40 assistant observers, at \$720 each	28,800.00
10 repairmen, at \$720 each	5,348.00	1 operator, at \$1,200	1,200.00	1 operator, at \$1,200	1,200.00
2 unskilled laborers, at \$720 each	1,440.00	1 expert in vessel reporting	840.00	1 expert in vessel reporting	840.00
1 unskilled laborer, at \$600	600.00	14 printers, at \$1,200 each	16,800.00	14 printers, at \$1,200 each	16,800.00
1 unskilled laborer, at \$480	480.00	16 printers, at \$1,000 each	16,000.00	16 printers, at \$1,000 each	16,000.00
1 unskilled laborer, at \$240	240.00	1 skilled mechanic	1,200.00	1 skilled mechanic	1,200.00
1 fireman, at \$600	1.67	1 skilled mechanic	1,000.00	1 skilled mechanic	1,000.00
3 station agents, at \$300 each	885.83	2 repairmen, at \$840 each	1,680.00	2 repairmen, at \$840 each	1,680.00
12 student assistants, at \$300 each	2,306.67	8 repairmen, at \$720 each	5,760.00	8 repairmen, at \$720 each	5,760.00
7 messengers, at \$720 each	4,900.00	1 unskilled laborer	720.00	1 unskilled laborer	720.00
12 messengers, at \$600 each	6,777.50	1 unskilled laborer	240.00	1 unskilled laborer	240.00
66 messengers, at \$480 each	31,351.18	1 unclassified laborer	720.00	1 unclassified laborer	720.00
30 messengers, at \$360 each	8,221.00	1 unclassified laborer	600.00	1 unclassified laborer	600.00
Miscellaneous employees (temporary and unassigned)	4,961.20	1 unclassified laborer	480.00	1 unclassified laborer	480.00
	565,013.90	1 fireman	720.00	1 fireman	720.00
Total expenditures to August 31, 1909	586,265.12	3 station agents, at \$300 each	900.00	3 station agents, at \$300 each	900.00
Balance to be turned back into Treasury	484.88	8 student assistants, at \$300 each	2,400.00	8 student assistants, at \$300 each	2,400.00
Total amount of appropriation	586,750.00	7 messengers, at \$720 each	5,040.00	7 messengers, at \$720 each	5,040.00
		13 messengers, at \$600 each	7,800.00	13 messengers, at \$600 each	7,800.00
		58 messengers, at \$480 each	27,840.00	58 messengers, at \$480 each	27,840.00
		45 messengers, at \$360 each	16,200.00	45 messengers, at \$360 each	16,200.00
		1 evaporation observer	1,530.00	1 evaporation observer	1,530.00
		1 evaporation observer	918.00	1 evaporation observer	918.00
		2 evaporation observers, at \$612 each	1,224.00	2 evaporation observers, at \$612 each	1,224.00
		For temporary assistance	1,978.00	For temporary assistance	1,978.00
			593,650.00		600,130.00
The employees on duty in Washington who were paid from the above-named appropriation were assigned to the various divisions and sections as in the foregoing pages.		The employees on duty in Washington who are being paid from the above-named appropriation are assigned to the various divisions and sections as in the foregoing pages.		The employees on duty in Washington who are to be paid from the above-named appropriation will be assigned to the various divisions and sections as in the foregoing pages.	
The employees outside of Washington who were paid from the same appropriation were assigned to the 206 stations located throughout the United States, the West Indies, and the Hawaiian Islands.		The employees outside of Washington who are being paid from the same appropriation are assigned to the 209 stations located throughout the United States, the West Indies, and the Hawaiian Islands.		The employees outside of Washington who are to be paid from the same appropriation will be assigned to the 215 stations located throughout the United States, the West Indies, and the Hawaiian Islands.	
General expenses, Weather Bureau, \$852,000:		Stationery	\$20,000.00	Stationery	\$20,000.00
Stationery	\$31,963.75	Miscellaneous supplies, services, etc.	44,000.00	Miscellaneous supplies, services, etc.	47,000.00
Miscellaneous supplies, services, etc.	148,519.43	Furniture	7,000.00	Furniture	7,000.00
Furniture	10,375.02	Fuel	6,000.00	Fuel	6,000.00
Fuel	5,910.36	Freight	7,000.00	Freight	7,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Salaries, station employees, Weather Bureau, \$586,750—Continued.	General expenses, Weather Bureau, \$1,277,950—Continued.	General expenses, Weather Bureau, \$1,277,110—Continued.
	Pay for storm and hurricane dis- playmen..... \$22,000.00	Pay for storm and hurricane dis- playmen..... \$22,000.00
	Pay for cranberry observations... 200.00	Pay for cranberry observations... 200.00
Total of appropriation..... \$552,000.00	Total of appropriation (a decrease from 1909 of \$160,800 under the com- bined appropriations for "salaries, station employees," and "gen- eral expenses")..... 1,277,950.00	Total amount estimated (a decrease from 1910 of \$840)..... 1,277,110.00
NOTE.—The above expenditures classified in ac- cordance with the suggestion of the Congressional Com- mittee on Expenditures for this department, were necessary in prosecuting the important work of the Weather Bureau. This work fell naturally under the following projects:	NOTE.—"Salaries, station employees," combined with "General expenses." NOTE.—The above expend- itures classified in accordance with the suggestion of the Con- gressional Committee on Ex- penditures for this depart- ment, are, being incurred in prosecuting the important work of the Weather Bureau. This work falls naturally un- der the following projects:	NOTE.—The above expend- itures classified in accordance with the suggestion of the Con- gressional Committee on Ex- penditures for this depart- ment, have been submitted as necessary for prosecuting the important work of the Weath- er Bureau. This work will fall naturally under the fol- lowing projects:
PROJECTS.	PROJECTS.	PROJECTS.
The general work of the Weather Bureau outside of Washington was carried on under the authority contained in two appropriations, viz: "Salaries, Weather Bureau," from which all commissioned and temporary employees were paid, and "General expenses, Weather Bureau," from which all other expenses were paid. The commis- sioned employees were located at 206 stations, the majority of which served as centers for the prosecution of forecast, climatological, crop, river, and flood work, etc., in the sur- rounding sections. The official in charge and the employ- ees under him were engaged in the performance of the vari- ous lines of work that were carried on at each station. This work has been divided into projects, which are here- after described. As an illustration: The official in charge of the station at New Orleans is in charge of the climato- logical work of the State of Louisiana, the forecasting of stages for the rivers within the State, the taking and re- cording of observations, the issuing of daily weather and temperature forecasts, the making of frost and cold-wave forecasts for several States, the dissemination of storm and hurricane warnings, the collection and dissemination of special meteorological crop observations, ocean meteorol- ogical observations, the printing and issuing of weather maps, bulletins, forecast cards, etc. All of this work is done by the official in charge and his corps of assistants, much of it being done simultaneously, the total time de- voted to any one project varying from day to day according to existing weather conditions. The whole work is done in the same office, using the same furniture, stationery, and having a common expense for fuel, gas, electricity, etc. The work is so coordinated as to accomplish the greatest amount with the least expense, but the impracticability of determining an accurate cost of rent, gas, electricity, fuel, stationery, furniture, and other miscellaneous expenses, and the exact salary cost for each line of work is evident. The condition at New Orleans is typical of other stations. Therefore the cost indicated for each project has been ap- proximated, but it is reasonably correct.	(1) Administration (in Washing- ton), Willis L. Moore, Chief of Bureau: Salaries in Washington..... 107,220.00 Traveling and field expenses. 800.00 Fuel, lights, repairs, supplies, etc..... 25,000.00 133,020.00	(1) Administration (in Washing- ton), Willis L. Moore, Chief of Bureau: Salaries in Washington..... 107,220.00 Traveling and field expenses. 800.00 Fuel, lights, repairs, supplies, etc..... 25,000.00 133,020.00
(2) The Monthly Weather Review, Cleveland Abbe, pro- fessor of meteorology (Washington and Baltimore), editor: A summary of the weather of the month and the year, showing average temperature and other climatological data for about 3,600 land stations in the United States. The aim is to present the meteorological conditions for each month, so that the weather of any part of the United States can be easily compared with that of any other, or with any portion of the world.	(2) The Monthly Weather Review, Frank H. Bigelow, professor of meteorology (Washing- ton), editor: Salaries..... 8,890.00 Traveling and field expenses. 100.00 Paper, etc..... 3,000.00 11,990.00	(2) The Monthly Weather Re- view, Frank H. Bigelow, professor of meteorology (Washington), editor: Salaries..... 8,890.00 Traveling and field expenses. 100.00 Paper, etc..... 3,000.00 11,990.00
Salaries..... 105,652.73 Traveling and field expenses. 1,307.67 Fuel, lights, repairs, supplies, etc..... 19,740.88 126,701.28		
Salaries..... 10,693.96 Traveling and field expenses. 102.24 Paper, etc..... 2,395.00 13,191.20		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, station employees, Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,950—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,110—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(3) Forecast work, Edward B. Garriott, professor of meteorology (Washington), in charge:	(3) Forecast work, Edward B. Garriott, professor of meteorology (Washington), in charge:	(3) Forecast work, Edward B. Garriott, professor of meteorology (Washington), in charge:
(a) Weather and temperature forecasts: Made twice daily for all States; based upon observations of meteorological conditions made at about 230 stations in the United States, the West Indies, Hawaiian Islands, Alaska, the Azores, Iceland, Canada, and a few points in Europe and Asia.		
(b) Storm warnings: Warnings of storms likely to imperil shipping; distributed by telegraph, telephone, and other expeditious means to all ports on the Atlantic, Pacific, and Gulf seacoasts and Great Lakes that are within the threatened zone.		
(c) Cold waves: Advices of coming cold waves given in threatened districts twelve to thirty-six hours in advance by means of telegraph, telephone, mail, flag signals, etc.		
(d) Frost warnings: Issued during crop-growing seasons in the interest of fruit, truck, tobacco, and other growers.		
(e) Hurricane warnings: Special advices to threatened districts on Atlantic and Gulf coasts of approach of West Indian hurricanes.		
(f) Heavy snow warnings: For the benefit of transportation lines both in and out of cities.		
(g) The daily distribution of forecasts and meteorological information by maps, bulletins, forecast cards, etc.		
Salaries.....\$366,708.34	Salaries.....\$392,500.00	Salaries.....\$392,500.00
Traveling and field expenses.....13,451.81	Traveling and field expenses...10,120.00	Traveling and field expenses...10,120.00
Miscellaneous supplies and expenses.....249,984.87	Miscellaneous supplies and expenses.....280,000.00	Miscellaneous supplies and expenses.....280,000.00
630,145.02	682,620.00	682,620.00
(4) River and flood service, Harry C. Frankenfield, professor of meteorology (Washington), in charge:	(4) River and flood service, Harry C. Frankenfield, professor of meteorology (Washington), in charge:	(4) River and flood service, Harry C. Frankenfield, professor of meteorology (Washington), in charge:
For the staging of rivers, and the issuing of daily forecasts of water stages and of flood warnings, in the interest of commerce and navigation, and for the saving of life and property.		
Salaries.....60,577.14	Salaries.....73,000.00	Salaries.....73,000.00
Traveling and field expenses.....1,221.43	Traveling and field expenses....880.00	Traveling and field expenses...880.00
Miscellaneous supplies and expenses.....20,832.07	Miscellaneous supplies and expenses.....30,000.00	Miscellaneous supplies and expenses.....30,000.00
82,630.64	103,880.00	103,880.00
(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:	(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:	(5) Cranberry marsh investigations, Henry J. Cox, professor of meteorology (Chicago), in charge:
Conducted in the marshes of Wisconsin for the purpose of improving frost warnings for benefit of this industry, which is peculiarly subject to damage by frost.		
Salaries.....365.77	Salaries.....500.00	Salaries.....500.00
Miscellaneous supplies and expenses.....250.00	Miscellaneous supplies and expenses.....250.00	Miscellaneous supplies and expenses.....250.00
615.77	750.00	750.00
(6) Climatological and crop work, Frank H. Bigelow, professor of meteorology (Washington), in charge:	(6) Climatological and crop work, Frank H. Bigelow, professor of meteorology (Washington), in charge:	(6) Climatological and crop work, Frank H. Bigelow, professor of meteorology (Washington), in charge:
(a) Climatological work: Establishing the climatology of the United States by means of meteorological observations taken at regular stations and by about 3,600 cooperative observers located in each county of the United States. The data for each State is collected monthly at a regular station designated as the state center, and published in quarto size.		
(b) Meteorological crop reports: Special observations of weather, precipitation, and temperature taken at about 290 places in the great cereal and cotton belts and telegraphed daily to district centers, where they are issued in bulletin form for the benefit of the corn, cotton, sugar, rice, and wheat interests. Weekly bulletins, giving the summary of weather conditions for the preceding week that have had marked bearing on crops, are printed and issued from each state center.		
Salaries.....108,835.30	Salaries.....152,000.00	Salaries.....152,000.00
Traveling and field expenses.....3,664.28	Traveling and field expenses...2,860.00	Traveling and field expenses...2,860.00
Miscellaneous supplies and expenses.....62,496.22	Miscellaneous supplies and expenses.....70,000.00	Miscellaneous supplies and expenses.....70,000.00
174,995.80	224,860.00	224,860.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, station employees, Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,950—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,110—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Marine meteorology, Henry L. Heiskell, chief of division (Washington), in charge: (a) Marine meteorological work: The collection of meteorological and physical information pertaining to the oceans, for vessels of war, of commerce, etc.; plotting the data on daily synoptic charts, etc., and the preparation of data for use in the monthly pilot charts of the Atlantic and Pacific oceans issued by the Hydrographic Office. (b) Vessels reporting: The arrival and departure of passing vessels for the benefit of commerce and navigation at certain stations located on the Atlantic, Gulf, and Pacific coasts. Salaries..... \$30,180.00 Traveling and field expenses..... 150.00 Miscellaneous supplies and expenses..... 1,023.67 31,353.67	(7) Marine meteorology, Henry L. Heiskell, chief of division (Washington), in charge: Salaries..... \$32,000.00 Traveling and field expenses... 220.00 Miscellaneous supplies and expenses..... 1,450.00 33,670.00	(7) Marine meteorology, Henry L. Heiskell, chief of division (Washington), in charge: Salaries..... \$32,000.00 Traveling and field expenses... 220.00 Miscellaneous supplies and expenses..... 1,450.00 33,670.00
(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge: For conducting meteorological observations for the improvement of weather forecasts, warnings, etc. (a) Meteorological observation station work. (b) Studies of the atmosphere at the surface of the earth and at various altitudes, determinations of its temperature, moisture content, pressure, state of electrification, direction and magnitude of its movements, its cloudiness, dust content, absorption of light, of heat, and of electric waves, and its various other properties. (c) Solar investigations, involving a careful measurement of the insolation or amount of solar energy reaching the earth in a unit of time, the size and distribution of sun spots, faculae, and prominences, and an especial effort to detect all changes in the registered amounts of the solar energy and a careful effort to refer these changes to their real causes, whether of terrestrial or of solar origin. (d) Terrestrial magnetism: A study of the regular and of the irregular changes in the magnitude and direction of the earth's magnetic force in connection with other terrestrial phenomena and with solar activities of all kinds. (e) Laboratory investigations: The reproduction under controllable conditions of various meteorological phenomena and experiments that may aid in explaining the origin and laws of weather conditions; also the construction and standardizing of certain apparatus. Salaries..... 23,120.00 Traveling and field expenses..... 1,148.59 Miscellaneous supplies, apparatus, etc..... 13,264.70 37,533.29	(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge: Salaries..... 21,950.00 Traveling and field expenses... 880.00 Miscellaneous supplies, apparatus, etc..... 20,000.00 42,830.00	(8) Research observatory, Alfred J. Henry, professor of meteorology (Mount Weather, Va.), in charge: Salaries..... 21,950.00 Traveling and field expenses... 880.00 Miscellaneous supplies, apparatus, etc..... 20,000.00 42,830.00
(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge: Testing, comparing, devising, and making the delicate and dependable instruments that are required in practical and scientific meteorological work. Salaries..... 38,370.00 Traveling and field expenses..... 1,221.43 Miscellaneous supplies and expenses..... 24,963.34 64,554.77	(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge: Salaries..... 41,000.00 Traveling and field expenses... 880.00 Miscellaneous supplies and expenses..... 25,000.00 66,880.00	(9) Instruments, Charles F. Marvin, professor of meteorology (Washington), in charge: Salaries..... 41,000.00 Traveling and field expenses... 880.00 Miscellaneous supplies and expenses..... 25,000.00 66,880.00
(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.), Henry B. Hersey, inspector (Milwaukee, Wis.). Two officials who are charged with the inspection of the personnel, records, and service at the 206 regular stations of the bureau: Salaries..... 5,000.00 Traveling and field expenses..... 1,733.81 6,733.81	(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.), Henry B. Hersey, inspector (Milwaukee, Wis.): Salaries..... 5,000.00 Traveling and field expenses... 1,300.00 6,300.00	(10) Inspection of stations, Norman B. Conger, inspector (Detroit, Mich.), Henry B. Hersey, inspector (Milwaukee, Wis.): Salaries..... 5,000.00 Traveling and field expenses... 1,300.00 6,300.00
(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge: The collection and dissemination of observations, reports, forecasts, warnings, etc., including the maintenance and repair of telegraph and cable lines. The Weather Bureau operates several government telegraph and cable lines, which are maintained for the securing of meteorological observations and in the interest of navigation, including the reporting of wrecks and marine casualties. Salaries..... 28,132.00 Traveling and field expenses..... 732.86 Miscellaneous supplies and expenses..... 8,367.97 37,232.83	(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge: Salaries..... 29,000.00 Traveling and field expenses... 440.00 Miscellaneous supplies and expenses..... 8,500.00 37,940.00	(11) Telegraph service, Jesse H. Robinson, chief of division (Washington), in charge: Salaries..... 29,000.00 Traveling and field expenses... 440.00 Miscellaneous supplies and expenses..... 8,500.00 37,940.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Weather Bureau—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, station employees. Weather Bureau, \$586,750—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,950—Continued.</i>	<i>General expenses, Weather Bureau, \$1,277,110—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(12) Records, James Berry, chief of division (Washington), in charge: Taking observations, correcting, and compiling the meteorological records made by the bureau at all regular stations. Salaries..... \$68,928.00 Traveling and field expenses..... 2,931.42 Miscellaneous supplies and expenses..... 49,996.98 <u>121,856.40</u>	(12) Records, James Berry, chief of division (Washington), in charge: Salaries..... \$73,000.00 Traveling and field expenses... 2,420.00 Miscellaneous supplies and expenses..... 45,000.00 <u>120,420.00</u>	(12) Records, James Berry, chief of division (Washington), in charge: Salaries..... \$73,000.00 Traveling and field expenses... 2,420.00 Miscellaneous supplies and expenses..... 45,000.00 <u>120,420.00</u>
(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge: The construction and repair of observatory buildings outside of the District of Columbia. Salaries..... 1,500.00 Traveling and field expenses..... 866.70 Miscellaneous supplies and expenses..... 64,356.38 <u>66,723.08</u>	(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge: Salaries..... 1,500.00 Traveling and field expenses... 440.00 Miscellaneous supplies and expenses..... 9,000.00 <u>10,940.00</u>	(13) Buildings, Edgar B. Calvert, assistant chief, Division of Accounts (Washington), in charge: Salaries..... 1,500.00 Traveling and field expenses... 440.00 Miscellaneous supplies and expenses..... 9,000.00 <u>10,940.00</u>
(14) Evaporation, Frank H. Bigelow, professor of meteorology (Washington), in charge: The overflow of the Colorado River through the irrigation ditches in the Imperial Valley filled the old Salton Basin, 285 feet below sea level, to the depth of 80 feet. The Salton Sea now presents a surface of several hundred square miles and affords an exceptional opportunity for evaporation investigations. These investigations will determine the rate at which valuable subjugated lands will be recovered, and solve many problems that are of vital importance to engineers engaged in irrigation, waterways, and reclamation work. Evaporation and rainfall are correlative factors in the supplying of water for reservoirs, waterways, and farming generally, but meteorologists have heretofore been limited to the collection of precipitation data only, and there is a lack of knowledge regarding the losses by evaporation. It is a gap in practical science greatly needing to be filled. Salaries..... 8,581.83 Traveling and field expenses... 1,055.33 Miscellaneous supplies and expenses..... 17,180.95 <u>26,818.11</u>	(14) Evaporation, Frank H. Bigelow, professor of meteorology (Washington), in charge: Salaries..... 13,500.00 Traveling and field expenses... 660.00 Miscellaneous supplies and expenses..... 18,000.00 <u>32,160.00</u>	(14) Evaporation, Frank H. Bigelow, professor of meteorology (Washington), in charge: Salaries..... 13,500.00 Traveling and field expenses... 660.00 Miscellaneous supplies and expenses..... 18,000.00 <u>32,160.00</u>
Total appropriation for Weather Bureau..... 1,662,260.00	Total appropriation for Weather Bureau (a decrease from 1909 of \$154,000)..... 1,508,260.00	Total amount estimated for Weather Bureau (no increase over 1910)..... 1,508,260.00
Total net expenditures to August 31, 1909..... 1,421,075.67		
Outstanding liabilities on August 31, 1909 (estimated)..... 227,014.73		
Balance to be turned back into Treasury (estimated)..... 14,169.60		

BUREAU OF ANIMAL INDUSTRY.

<i>Salaries, Bureau of Animal Industry, 1909, \$83,660.</i>	<i>Salaries, Bureau of Animal Industry, 1910, \$114,100.</i>	<i>Salaries, Bureau of Animal Industry, 1911, \$115,920.</i>
Melvin, A. D..... Chief of bureau, at \$5,000..... \$5,000.00	1 chief of bureau..... \$5,000.00	1 chief of bureau..... \$5,000.00
Carroll, Charles C..... } Chief clerk, at \$2,000..... 1,833.34	1 chief clerk..... 2,000.00	1 chief clerk..... 2,000.00
Jones, E. B..... } Editor, at \$2,000..... 2,000.00	1 editor and compiler..... 2,000.00	1 editor and compiler..... 2,000.00
Pickens, J. M..... } Clerk, class four..... 1,800.00	4 clerks, class four..... 7,200.00	4 clerks, class four..... 7,200.00
Abel, Joseph..... } Clerk, class four..... 150.00	5 clerks, class three..... 8,000.00	5 clerks, class three..... 8,000.00
Carroll, Charles C..... } Clerk, class four..... 1,650.00	15 clerks, class two..... 21,000.00	17 clerks, class two (increase of two by transfer from lump fund)..... 23,800.00
Few, I. W..... } Clerk, class four..... 1,015.00	1 clerk..... 1,300.00	1 clerk..... 1,300.00
Chase, James L..... } Clerk, class four..... 1,800.00	14 clerks, class one..... 14,000.00	15 clerks, class one (increase of one by transfer from lump fund)..... 18,000.00
Newmyer, E. J..... } Clerk, class three..... 1,600.00	5 clerks, at \$900 each..... 4,500.00	14 clerks, at \$1,000 each..... 14,000.00
Cross, C. H..... } Clerk, class three..... 1,600.00	3 clerks, at \$840 each..... 2,520.00	6 clerks, at \$900 each (increase of one by transfer from lump fund)..... 5,400.00
La Pelle, Zebedee..... } Clerk, class three..... 1,600.00	5 clerks, at \$720 each..... 3,600.00	3 clerks, at \$840 each..... 2,520.00
Moran, H. E..... } Clerk, class three..... 1,600.00	1 mechanic..... 1,200.00	5 clerks, at \$720 each..... 3,600.00
Rice, J. A..... } Clerk, class three..... 1,551.10	1 messenger and custodian..... 1,000.00	1 clerk (by transfer from lump fund)..... 700.00
Roberts, John..... } Clerk, class two..... 1,400.00	1 carpenter..... 1,100.00	1 instrument maker (in lieu of one mechanic, at \$1,200)..... 1,200.00
Bennet, E. A..... } Clerk, class two..... 1,400.00	3 carpenters, at \$900 each..... 2,700.00	1 architect (by transfer from lump fund)..... 1,400.00
Cohran, J. R..... } Clerk, class two..... 350.00	1 painter..... 900.00	1 messenger and custodian..... 1,000.00
Edsall, H. M..... } Clerk, class two..... 1,400.00	3 messengers, at \$840 each..... 2,520.00	NOTE.—One carpenter at \$1,100, 3 carpenters at \$900, and 1 painter at \$900 transferred to the Secretary's roll.
Haughton, Nellie F..... } Clerk, class two..... 1,400.00	4 messengers, at \$720 each..... 2,880.00	3 messengers, at \$840 each..... 2,520.00
Hornbaker, J. N..... } Clerk, class two..... 1,400.00	2 messenger boys, at \$480 each..... 960.00	
Housman, Anna M..... } Clerk, class two..... 1,400.00	1 skilled laborer..... 840.00	
Johnston, E. C..... } Clerk, class two..... 816.67	2 skilled laborers, at \$720 each..... 1,440.00	
Magee, R. W..... } Clerk, class two..... 1,400.00	3 skilled laborers, at \$600 each..... 1,800.00	
More, F. C..... } Clerk, class two..... 917.78	1 skilled laborer..... 660.00	
Myers, Carrie..... } Clerk, class two..... 202.22	1 illustrator..... 1,400.00	
Price, H. N..... } Clerk, class two..... 1,400.00	4 laborers, at \$600 each..... 2,400.00	
Sartz, R. S. N..... } Clerk, class one..... 1,200.00	1 laborer..... 480.00	
Allen, Burr..... } Clerk, class one..... 1,200.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.			Appropriations for the current fiscal year ending June 30, 1910.			Estimated expenditures for the fiscal year ending June 30, 1911.		
Salaries, Bureau of Animal Industry, 1909, \$83,600—Continued.			Salaries, Bureau of Animal Industry, 1910, \$114,100—Continued.			Salaries, Bureau of Animal Industry, 1911, \$115,920—Continued.		
Arlitt, John L.	Clerk, class one	\$1,146.67	1 charwoman		\$540.00	4 messengers, at \$720 each		\$2,880.00
Dent, Mary T.	Clerk, class one	1,130.00	6 charwomen, at \$480 each		2,880.00	2 messenger boys, at \$480 each		960.00
Fagan, Mary E.	Clerk, class one	1,200.00	2 charwomen, at \$240 each		480.00	1 messenger boy (by transfer from lump fund)		360.00
Gibbs, Henry C.	Clerk, class one	1,200.00	Total amount of above appropriation (an increase over 1909 of \$30,440) . .			1 skilled laborer		840.00
Gibbs, B. H.	Clerk, class one	1,200.00	114,100.00			1 skilled laborer (decrease of one by transfer to the Secretary's roll)		720.00
Hickey, Edward J.	Clerk, class one	500.00				2 skilled laborers, at \$600 each (decrease of one by transfer to the Secretary's roll)		1,200.00
Mahon, M. H.	Clerk, class one	1,200.00				1 skilled laborer		660.00
Meyst, F. W.	Clerk, class one	1,200.00				1 illustrator		1,400.00
Graves, J. M.	Clerk, class one	173.33				4 laborers, at \$600 each		2,400.00
Ruddiman, Harry D.	Clerk, class one	350.00				2 laborers, at \$480 each (increase of one by transfer from lump fund)		960.00
Summer, Louis C.	Clerk, class one	746.67				1 charwoman		540.00
Swank, W. R.	Clerk, class one	1,200.00				6 charwomen, at \$480 each		2,880.00
Tyson, Fanny	Clerk, class one	1,199.45				2 charwomen, at \$240 each		480.00
Henderson, Alice	Clerk, at \$1,000	747.23				Total amount estimated (an apparent increase over 1910 of \$1,820) . .		
Pirtle, T. R.	Clerk, at \$1,000	1,000.00				115,920.00		
Porter, Harry W.	Clerk, at \$1,000	1,000.00				NOTE.—Two clerks class two, 1 clerk class one, 1 clerk at \$900, 1 clerk at \$700, 1 architect at \$1,400, 1 messenger boy at \$360, and 1 laborer at \$480, aggregating \$7,840, have been added by transfer from the lump fund appropriation for general expenses, and that appropriation has been reduced accordingly. One carpenter at \$1,100, 3 carpenters at \$900 each, 1 painter at \$900, 1 skilled laborer at \$720, and 1 skilled laborer at \$600, aggregating \$6,020, have been omitted by transfer to the Secretary's roll. Net increase \$1,820. One mechanic at \$1,200 has been changed to 1 instrument maker at same salary.		
Simonton, L. J.	Clerk, at \$1,000	277.78				Administration		19,620.00
Summer, Louis C.	Clerk, at \$1,000	377.77				Inspection division		9,000.00
Walters, Mildred E.	Clerk, at \$1,000	1,000.00				Quarantine division		2,500.00
Jones, Willie W.	Clerk, at \$900	899.83				Dairy division		11,500.00
Ormsby, Andrew A.	Clerk, at \$900	900.00				Biochemic division		4,500.00
Rapp, Emma V.	Clerk, at \$900	750.00				Pathological division		8,500.00
Imhoff, Lillie V.	Clerk, at \$840	711.67				Zoological division		4,200.00
Wood, Elizabeth J.	Clerk, at \$840	840.00				Animal husbandry		4,500.00
Johnson, Victorine E.	Clerk, at \$720	720.00				Editorial office		6,500.00
Phillips, Ella M.	Clerk, at \$720	720.00				Office of Accounts		13,500.00
Sands, Laura A.	Clerk, at \$720	546.00				Appointment Section		6,000.00
Brough, William	Mechanic, at \$1,200	1,200.00				Library		2,800.00
Stedman, R. G.	Messenger and custodian, at \$1,000	1,000.00				File room		4,800.00
Thompson, R. E. L.	Carpenter, at \$1,100	1,100.00				Property room		6,200.00
Stedman, William P.	Messenger, at \$840	840.00				Carpenter shop		11,800.00
Mull, R. B.	Messenger, at \$720	720.00				Total		115,920.00
Nicholas, John	Messenger, at \$720	720.00						
Sbimoneck, William C.	Messenger, at \$720	720.00						
Goetz, Lena B.	Skilled laborer, at \$840	840.00						
Perry, J. M.	Skilled laborer, at \$720	720.00						
Berlin, S. S.	Skilled laborer, at \$600	600.00						
Phillips, Annie E.	Skilled laborer, at \$600	600.00						
Scheerer, George W.	Skilled laborer, at \$660	660.00						
Haines, W. S. D.	Illustrator, at \$1,400	1,400.00						
Total		72,109.17						
Unexpended balance		11,550.83						
Total amount of above appropriation		83,660.00						
Administration		12,903.89	Administration		17,800.00	Administration		19,620.00
Inspection division		4,244.44	Inspection division		9,000.00	Inspection division		9,000.00
Quarantine division		2,025.00	Quarantine division		2,500.00	Quarantine division		2,500.00
Dairy division		8,056.67	Dairy division		11,500.00	Dairy division		11,500.00
Biochemic division		2,470.00	Biochemic division		4,500.00	Biochemic division		4,500.00
Pathological division		7,479.28	Pathological division		8,500.00	Pathological division		8,500.00
Zoological division		1,915.56	Zoological division		4,200.00	Zoological division		4,200.00
Animal husbandry		2,350.00	Animal husbandry		4,500.00	Animal husbandry		4,500.00
Editorial office		7,097.10	Editorial office		6,500.00	Editorial office		6,500.00
Office of Accounts		10,341.67	Office of Accounts		13,500.00	Office of Accounts		13,500.00
Appointment Section		5,040.00	Appointment Section		6,000.00	Appointment Section		6,000.00
Library		1,587.23	Library		2,800.00	Library		2,800.00
File room		1,725.00	File room		4,800.00	File room		4,800.00
Property room		2,573.33	Property room		6,200.00	Property room		6,200.00
Carpenter shop		2,300.00	Carpenter shop		11,800.00	Carpenter shop		11,800.00
Total		72,109.17	Total		114,100.00	Total		115,920.00
General expenses, Bureau of Animal Industry, 1909 (including \$150,000 in deficiency act, February 9, 1909, and \$150,000 in deficiency act, March 4, 1909), \$1,247,200.			General expenses, Bureau of Animal Industry, 1910, \$1,263,760.			General expenses, Bureau of Animal Industry, 1911, \$1,234,540.		
Salaries:			Salaries:			Salaries:		
In Washington		\$153,535.06	In Washington		\$98,700.00	In Washington		\$88,900.00
Out of Washington		550,744.97	Out of Washington		736,300.00	Out of Washington		736,300.00
Stationery		2,267.24	Stationery		6,000.00	Stationery		6,000.00
Miscellaneous supplies and services, equipment, books, machinery, etc.		170,559.38	Miscellaneous supplies and services, including fuel, freight, express, telegraph, telephone, lights, experimental animals, experimental dairy products, forage, lumber, livery service, laboratory apparatus, etc.		114,660.00	Miscellaneous supplies and services, including fuel, freight, express, telegraph, telephone, lights, experimental animals, experimental dairy products, forage, lumber, livery service, laboratory apparatus, etc.		95,240.00
Furniture		2,376.92	Furniture		10,000.00	Furniture		10,000.00
Fuel		4,472.59	Rent		6,000.00	Rent		6,000.00
Freight		267.95	Travel expenses		292,100.00	Travel expenses		292,100.00
Express		1,442.46	Total amount of above appropriation (an increase over 1909 of \$16,560) . .			Total amount estimated (a decrease from 1910 of \$29,220) . .		
Telegraph		1,970.16	1,263,760.00			1,234,540.00		
Telephone		2,242.87						
Rent		6,943.00						
Gas and electricity		2,189.52						
Apparatus, instruments, and laboratory materials		12,064.45						
Travel and station and field expenses		290,831.97						
Total expenditures to August 31, 1909		1,201,908.54						
Less repayments to credit of appropriation		1,899.40						
Net expenditures to August 31, 1909		1,200,009.14						
Outstanding liabilities August 31, 1909 (estimated)		20,908.80						
Balance to be turned back to Treasury (estimated)		26,282.06						
Total amount of above appropriation		1,247,200.00						

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>General expenses, Bureau of Animal Industry, 1909 (including \$150,000 in deficiency act, February 9, 1909, and \$150,000 in deficiency act, March 4, 1909), \$1,247,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,263,760—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1911, \$1,234,540—Continued.</i>
PROJECTS.	PROJECTS.	PROJECTS.
(1) Eradication of scabies in sheep:	(1) Eradication of scabies in sheep:	(1) Eradication of scabies in sheep:
Salaries..... \$178,073.09	Salaries..... \$200,000.00	Salaries..... \$200,000.00
Travel expense..... 109,541.47	Travel expense..... 120,000.00	Travel expense..... 120,000.00
Miscellaneous expense..... 9,707.92	Miscellaneous expense..... 5,000.00	Miscellaneous expense..... 5,000.00
297,322.48	325,000.00	325,000.00
This work has for its ultimate object the complete eradication from the United States of the contagious disease known as "scabies" or "scab" of sheep. The methods employed are quarantine, inspection, dipping of affected or exposed animals in disinfecting solutions for the destruction of the mites which cause the disease, disinfection of ears, stock yards, etc. The work was conducted in North Dakota, South Dakota, Kansas, Nebraska, Colorado, Montana, Wyoming, Utah, Oregon, California, Nevada, New Mexico, Arizona, and Texas. The prevalence of the disease and the area in which it exists have been greatly reduced.		
(2) Eradication of scabies in cattle:	(2) Eradication of scabies in cattle:	(2) Eradication of scabies in cattle:
Salaries..... 132,310.33	Salaries..... 100,000.00	Salaries..... 100,000.00
Travel expense..... 46,832.10	Travel expense..... 35,000.00	Travel expense..... 35,000.00
Miscellaneous expense..... 1,102.65	Miscellaneous expense..... 5,000.00	Miscellaneous expense..... 5,000.00
180,245.08	140,000.00	140,000.00
This disease is similar to scabies of sheep, and the object of the work and the methods followed are the same. During the fiscal year the work was carried on in North Dakota, South Dakota, Kansas, Nebraska, Colorado, Montana, Wyoming, Oklahoma, Texas, and New Mexico.		
(3) Eradication of foot-and-mouth disease:		
Salaries..... 111,976.85		
Travel expense..... 77,805.95		
Miscellaneous expense..... 109,462.21		
299,245.01		
An outbreak of foot-and-mouth disease was discovered in November, 1908, in the States of Pennsylvania, New York, Michigan, and Maryland, and was eradicated in cooperation with state authorities. The method was to enforce a strict quarantine, to discover all infected animals and localities, and to slaughter and bury all diseased and exposed animals and disinfect the premises occupied by them. The owners of condemned animals were also paid for property destroyed or damaged in disinfection, the department paying two-thirds and the State one-third. The federal quarantine began November 13, 1908, and was removed April 24, 1909. The number of animals slaughtered was 3,636.		
(4) Inspection of southern cattle:	(4) Inspection of southern cattle:	(4) Inspection of southern cattle:
Salaries..... 27,252.52	Salaries..... 35,000.00	Salaries..... 35,000.00
Travel expense..... 4,954.43	Travel expense..... 10,000.00	Travel expense..... 10,000.00
Miscellaneous expense..... 662.36	Miscellaneous expense..... 5,000.00	Miscellaneous expense..... 3,000.00
32,869.31	50,000.00	48,000.00
This work consists in the inspection of cattle in sections quarantined or provisionally quarantined on account of Texas or southern cattle fever, to determine whether they carry infection and under what conditions they are entitled to move out of these sections, and in following up work of tick eradication so as to hold ground gained and prevent reinfection.		
(5) Supervision of transportation of live stock and inspection of vessels:	(5) Supervision of transportation of live stock and inspection of vessels:	(5) Supervision of transportation of live stock and inspection of vessels:
Salaries..... 10,678.23	Salaries..... 29,000.00	Salaries..... 29,000.00
Travel expense..... 2,765.50	Travel expense..... 700.00	Travel expense..... 700.00
Miscellaneous expense..... 113.66	Miscellaneous expense..... 300.00	Miscellaneous expense..... 300.00
13,557.39	30,000.00	30,000.00
Animals are inspected at shipping and stock centers in order to prevent the spread of contagious diseases through interstate commerce. The shipment of live stock is also supervised with a view to the enforcement of the act of June 29, 1906, commonly known as the "twenty-eight-hour law."	Execution of the twenty-eight-hour law:	Execution of the twenty-eight-hour law:
	Salaries..... 8,000.00	Salaries..... 8,000.00
	Travel expense..... 6,500.00	Travel expense..... 6,500.00
	Miscellaneous expense..... 500.00	Miscellaneous expense..... 500.00
	15,000.00	15,000.00
(6) Inspection and quarantine of imported animals:	(6) Inspection and quarantine of imported animals:	(6) Inspection and quarantine of imported animals:
Salaries..... 28,938.48	Salaries..... 23,000.00	Salaries..... 23,000.00
Travel expense..... 5,780.75	Travel expense..... 4,000.00	Travel expense..... 4,000.00
Miscellaneous expense..... 10,221.27	Miscellaneous expense..... 3,000.00	Miscellaneous expense..... 3,000.00
44,940.50	30,000.00	30,000.00
All animals offered for importation are carefully inspected, and some are quarantined, to prevent the introduction of contagious diseases. Quarantine stations are maintained at several places.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>General expenses, Bureau of Animal Industry, 1909 (including \$150,000 in deficiency act, February 9, 1909, and \$150,000 in deficiency act, March 4, 1909), \$1,247,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,283,760—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1911, \$1,234,540—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(7) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:	(7) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:	(7) Inspection work relative to existence of contagious diseases and tuberculin and mallein testing of animals:
Salaries..... \$4,923.00	Salaries..... \$20,000.00	Salaries..... \$20,000.00
Travel expense..... 4,420.50	Travel expense..... 10,000.00	Travel expense..... 10,000.00
Miscellaneous expense..... 70.00	Miscellaneous expense..... 5,000.00	Miscellaneous expense..... 5,000.00
9,413.50	35,000.00	35,000.00
This covers miscellaneous field work, such as investigation of reported outbreaks of disease, inspections to determine whether certain contagious diseases exist, and testing of cattle for tuberculosis and horses for glanders.		
(8) Eradication of southern cattle ticks:	(8) Eradication of southern cattle ticks:	(8) Eradication of southern cattle ticks:
(Prior to the fiscal year of 1910 this was a separate appropriation.)		
This work has been carried on in cooperation with state authorities in Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Missouri, Arkansas, Oklahoma, Louisiana, Texas, and California under special appropriations, and consists in the extermination of the ticks which transmit the infection of Texas or southern cattle fever. The results so far indicate that the ultimate complete extermination of this costly pest is entirely practicable.		
(9) Investigations and experiments in dairy industry:	(9) Investigations and experiments in dairy industry:	(9) Investigations and experiments in dairy industry:
Salaries..... 73,815.80	Salaries..... 75,000.00	Salaries..... 73,600.00
Travel expense..... 31,808.70	Travel expense..... 21,000.00	Travel expense..... 21,000.00
Miscellaneous expense..... 12,811.74	Miscellaneous expense..... 15,000.00	Miscellaneous expense..... 15,000.00
118,436.24	111,000.00	109,600.00
This work includes investigations in the manufacture, transportation, and storage of butter; the manufacture of American cheddar, Swiss, and other European varieties of cheese, and the problems incident to their storage and distribution; the problems involved in supplying cities with pure milk; investigation of milk secretion, including the effect of feed, water, breed, and individuality of the animal on the composition of the milk; investigations in the organization and management of dairy enterprises from an economic standpoint, including the collection of monthly reports from creameries and cheese factories to obtain information for the improvement of methods in common use.	Cooperative investigations of the dairy industry in the Southern States:	Cooperative investigations of the dairy industry in the Southern States:
(10) Inspection of renovated butter factories and markets:	(10) Inspection of renovated butter factories and markets:	(10) Inspection of renovated butter factories and markets:
Salaries..... 5,250.00	Salaries..... 6,000.00	Salaries..... 6,000.00
Travel expense..... 2,540.35	Travel expense..... 3,400.00	Travel expense..... 3,400.00
Miscellaneous expense..... 683.63	Miscellaneous expense..... 600.00	Miscellaneous expense..... 600.00
8,473.98	10,000.00	10,000.00
This inspection is maintained under act of Congress of May 9, 1902.		
(11) Investigations and experiments in animal husbandry:	(11) Investigations and experiments in animal husbandry:	(11) Investigations and experiments in animal husbandry:
Salaries..... \$15,947.12	Salaries..... 21,000.00	Salaries..... 20,100.00
Travel expense..... 4,409.00	Travel expense..... 18,000.00	Travel expense..... 18,000.00
Miscellaneous expense..... 1,346.23	Miscellaneous expense..... 4,000.00	Miscellaneous expense..... 3,900.00
21,702.35	43,000.00	42,000.00
This work includes supervision of pedigree record associations under paragraph 473 of the tariff act of July 24, 1897, as amended March 3, 1903; experiments in feeding cotton-seed products to hogs to determine the effects of such products and to devise a safe method of feeding them; experiments in breeding and feeding poultry; efforts to devise a uniform classification for American carriage horses for use at fairs and to encourage the breeding of such horses, and experiments in breeding small animals to elucidate problems of heredity with regard to inbreeding, crossbreeding, selection, telegony, etc.		
(12) Scientific investigations of diseases in animals:	(12) Scientific investigations of diseases in animals:	(12) Scientific investigations of diseases in animals:
Salaries..... 69,759.83	Salaries..... 80,000.00	Salaries..... 79,300.00
Travel expense..... 5,544.59	Travel expense..... 4,000.00	Travel expense..... 4,000.00
Miscellaneous expense..... 54,874.27	Miscellaneous expense..... 25,000.00	Miscellaneous expense..... 24,700.00
130,178.69	109,000.00	108,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>General expenses, Bureau of Animal Industry, 1909 (including \$150,000 in deficiency act, February 9, 1909, and \$150,000 in deficiency act, March 4, 1909), \$1,247,200—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1910, \$1,263,760—Continued.</i>	<i>General expenses, Bureau of Animal Industry, 1911, \$1,234,540—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Some of the diseases investigated are hog cholera, tuberculosis, glanders, rabies, mycotic stomatitis, quail diseases, Malta fever in imported goats, surra in imported cattle, fowl cholera, and parasitic diseases of sheep and other animals.	Purchase of land for experimental station: Miscellaneous expense..... \$25,000.00	For all necessary expenses for the equipment of a bureau experiment station, including the necessary construction and alterations of buildings thereon, the construction and repair of fences, repairs, drains, and other incidental work..... \$12,000.00
(13) General administrative work: Salaries..... \$42,587.02 Travel expense..... 2,156.01 Miscellaneous expense..... 19,790.38 64,533.41	(13) General administrative work: Salaries..... 32,000.00 Travel expense..... 1,500.00 Miscellaneous expense..... 29,260.00 62,760.00	(13) General administrative work: Salaries..... 25,200.00 Travel expense..... 1,500.00 Miscellaneous expense..... 25,240.00 51,940.00
This covers the general administration and supervision of the bureau's work and includes all expenditures not otherwise chargeable.		
<i>General expenses, Bureau of Animal Industry, 1909 (animal breeding and feeding), \$50,000.</i>	<i>General expenses, Bureau of Animal Industry, 1910 (animal breeding and feeding), \$50,000.</i>	<i>General expenses, Bureau of Animal Industry, 1911 (animal feeding and breeding), \$50,000.</i>
Salaries outside of Washington..... \$18,084.53 Miscellaneous supplies and services, equipment, books, machinery, etc..... 23,906.35 Furniture..... 12.50 Fuel..... 233.75 Freight..... 362.81 Express..... 47.89 Telegraph..... .56 Telephone..... 58.85 Gas and electricity..... 207.29 Apparatus, instruments, and laboratory materials..... 33.01 Travel and station and field expenses..... 3,147.05 Total expenditure to August 31, 1909..... 46,114.59 Outstanding liability August 31, 1909 (estimated)..... 1,205.35 Balance to be turned back to Treasury (estimated)..... 2,680.06 Total amount of above appropriation..... 50,000.00	Salaries outside of Washington... \$14,100.00 Travel expense..... 2,300.00 Miscellaneous expense..... 33,600.00 Total amount of above appropriation (no increase)..... 50,000.00	Salaries outside of Washington... \$14,100.00 Travel expense..... 2,300.00 Miscellaneous expense..... 33,600.00 Total amount estimated (no increase)..... 50,000.00
PROJECT.	PROJECT.	PROJECT.
Animal feeding and breeding: Salaries..... 18,084.53 Travel expense..... 3,147.05 Miscellaneous expense..... 26,088.36 47,319.94	Animal feeding and breeding: Salaries..... 14,100.00 Travel expense..... 2,300.00 Miscellaneous expense..... 33,600.00 50,000.00	Animal feeding and breeding: Salaries..... 14,100.00 Travel expense..... 2,300.00 Miscellaneous expense..... 33,600.00 50,000.00
This work is conducted in cooperation with state experiment stations under a special appropriation of \$50,000. It consists of southern beef production in Alabama; breeding American carriage horses in Colorado; breeding gray draft horses in Iowa; poultry breeding in Maine; breeding milking Shorthorns in Minnesota; producing strain of Holstein dairy cattle adapted to North Dakota in North Dakota; animal nutrition investigations in Pennsylvania; Morgan horse breeding in Vermont, and sheep breeding to develop breed suited to range conditions in Wyoming.		
<i>Meat inspection, Bureau of Animal Industry, 1909, \$3,000,000.</i>	<i>Meat inspection, Bureau of Animal Industry, 1910, \$3,000,000.</i>	<i>Meat inspection, Bureau of Animal Industry, 1911, \$3,000,000.</i>
Salaries: In Washington..... \$109,441.63 Outside of Washington..... 2,663,430.02 Stationery..... 13,870.67 Miscellaneous supplies and services, equipment, books, machinery, etc..... 15,075.75 Furniture..... 1,762.24 Freight..... 449.71 Express..... 971.52 Telegraph..... 404.21 Telephone..... 2,773.47 Rent..... 17,627.08 Gas and electricity..... 230.10 Apparatus, instruments, and laboratory materials..... 9,499.84 Travel and station and field expenses..... 41,850.14 Total expenditures to August 31, 1909..... 2,877,386.43 Less repayments to credit of appropriation..... 5.35 Net expenditures to August 31, 1909..... 2,877,381.08 Outstanding liability August 31, 1909 (estimated)..... 11,263.99 Balance to be turned back to Treasury (estimated)..... 111,354.93 Total amount of above appropriation..... 3,000,000.00	Salaries: In Washington..... \$100,000.00 Outside of Washington..... 2,700,000.00 Stationery..... 10,000.00 Miscellaneous supplies and services, including freight, express, telegraph, telephone, gas and electricity, livery, laboratory apparatus, etc..... 70,000.00 Furniture..... 10,000.00 Rent..... 20,000.00 Meat-inspection stamps, certificates, tags, hog rings, seals, disks, sealing presses, brands... 40,000.00 Travel expenses..... 50,000.00 Total amount of above appropriation (no increase)..... 3,000,000.00	Salaries: In Washington..... \$100,000.00 Outside of Washington..... 2,700,000.00 Stationery..... 10,000.00 Miscellaneous supplies and services, including freight, express, telegraph, telephone, gas and electricity, livery, laboratory apparatus, etc..... 70,000.00 Furniture..... 10,000.00 Rent..... 20,000.00 Meat-inspection stamps, certificates, tags, hog rings, seals, disks, sealing presses, brands... 40,000.00 Travel expenses..... 50,000.00 Total amount of above appropriation (no increase)..... 3,000,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Animal Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Meat inspection, Bureau of Animal Industry, 1909, \$3,000,000—Cont'd.</i>	<i>Meat inspection, Bureau of Animal Industry 1910, \$3,000,000—Continued.</i>	<i>Meat inspection, Bureau of Animal Industry, 1911, \$3,000,000—Continued.</i>
PROJECT.	PROJECT.	PROJECT.
Meat inspection:	Meat inspection:	Meat inspection:
Salaries.....\$2,772,864.77	Salaries.....\$2,800,000.00	Salaries.....\$2,800,000.00
Travel expense.....40,547.80	Travel expense.....50,000.00	Travel expense.....50,000.00
Miscellaneous expense.....75,232.50	Miscellaneous expense.....150,000.00	Miscellaneous expense.....150,000.00
2,888,645.07	3,000,000.00	3,000,000.00
The meat-inspection service covers the inspection of animals before and at the time of slaughter, the condemnation of diseased carcasses, the supervision and preparation and shipment of meats and meat products, the stamping of packages, the issuance of certificates of inspection, and the inspection of live animals exported for slaughter abroad.	(Subsequent to the fiscal year of 1909 the appropriation "Eradicating cattle ticks, Bureau of Animal Industry," has been included as a subhead of the appropriation "General expenses, Bureau of Animal Industry.")	
<i>Eradicating cattle ticks, Bureau of Animal Industry, 1905-9, \$25,000; eradicated cattle ticks, Bureau of Animal Industry, 1909, \$225,000; total, \$250,000.</i>		
Salaries:		
In Washington.....\$666.67		
Outside of Washington.....174,937.82		
Stationery.....47.00		
Miscellaneous supplies and services, equipment, books, machinery, etc.....1,495.90		
Freight.....76.64		
Telegraph.....11.27		
Telephone.....67.39		
Rent.....573.50		
Travel and station and field expenses.....47,169.64		
Total expenditures to August 31, 1909.....225,045.83		
Outstanding liability to August 31, 1909 (estimated).....3,312.39		
Amount to be turned back to Treasury (estimated).....21,641.78		
Total amount of above appropriation.....250,000.00		
PROJECT.		
(1) Eradication of southern cattle ticks:		
Salaries.....175,604.49		
Travel expense.....47,685.80		
Miscellaneous expense.....5,067.93		
228,358.22		
This work has been carried on in cooperation with state authorities in Virginia, North Carolina, South Carolina, Louisiana, Alabama, Tennessee, Kentucky, Missouri, Arkansas, Oklahoma, Louisiana, Texas, and California, under special appropriations, and consists in the extermination of the ticks which transmit the infection of Texas and southern cattle fever. The results so far indicate that the ultimate complete extermination of this costly pest is entirely practicable.		
Total of all appropriations for Bureau of Animal Industry (including emergency appropriations amounting to \$300,000).....4,630,860.00	Total of all appropriations for Bureau of Animal Industry (a decrease from 1909 of \$203,000).....4,427,860.00	Total amount estimated for Bureau of Animal Industry (a decrease from 1910 of \$27,400).....4,400,460.00
Total net expenditures to August 31, 1909.....4,420,659.81		
Outstanding liabilities on August 31, 1909 (estimated).....36,690.53		
Balance to be turned back to Treasury (estimated).....173,509.66		

BUREAU OF PLANT INDUSTRY.

<i>Salaries, Bureau of Plant Industry, 1909, \$187,410.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$210,510.</i>	<i>Salaries, Bureau of Plant Industry, 1911, \$255,270.</i>
Galloway, B. T.....Chief of bureau, at \$5,000.....\$5,000.00	1 plant physiologist and pathologist, who shall be chief of bureau.....\$5,000.00	1 plant physiologist and pathologist, who shall be chief of bureau.....\$5,000.00
Jones, James E.....Chief clerk, at \$2,250.....2,250.00	1 chief clerk.....2,250.00	1 chief clerk.....2,250.00
Rockwell, J. E.....Editor, at \$2,000.....2,000.00	1 editor.....2,000.00	1 editor.....2,000.00
Estabrook, Leon M.....Officer in charge of records, at \$2,000.....2,000.00	1 superintendent of gardens and grounds.....1,800.00	1 superintendent of gardens and grounds.....1,800.00
Butterfield, E. C.....Superintendent of gardens and grounds, at \$1,800.....1,800.00	1 officer in charge of records.....2,000.00	1 officer in charge of records.....2,000.00
Byrnes, E. M.....Clerk, class four.....1,500.00	3 executive clerks, at \$1,980.....5,940.00	3 executive clerks, at \$1,980 each.....5,940.00
Bradley, E. H.....Clerk, class four.....300.00	4 clerks, class four.....7,200.00	1 executive assistant in grain investigations (by transfer from lump fund for general expenses).....1,800.00
Henkel, Alice.....Clerk, class four.....1,800.00	8 clerks, class three.....12,800.00	1 executive assistant in farm management (by transfer from lump fund for general expenses).....1,800.00
Fealy, Nellie E.....Clerk, class four.....1,637.50	1 clerk.....1,500.00	4 clerks, class four.....7,200.00
Long, W. W.....Clerk, class four.....1,800.00	13 clerks, class two.....18,200.00	8 clerks, class three.....12,800.00
Taylor, W. E.....Clerk, class three.....1,600.00	31 clerks, class one.....37,200.00	1 clerk.....1,500.00
Benner, H. A.....Clerk, class three.....1,600.00	1 seed clerk and superintendent.....1,200.00	15 clerks, class two (increase of 2 by transfer from lump fund for general expenses).....21,000.00
Callander, W. F.....Clerk, class three.....200.00	1 clerk.....1,080.00	
Ferrall, J. A.....Clerk, class three.....1,400.00	19 clerks, at \$1,000 each.....19,000.00	
Irwin, W. N.....Clerk, class three.....266.66	15 clerks, at \$900 each.....13,500.00	
Ferrall, J. A.....Clerk, class three.....1,328.88	16 clerks, at \$840 each.....13,440.00	
Wight, J. C.....Clerk, class three.....26.67	1 clerk.....800.00	
Gates, Otis H.....Clerk, class three.....1,573.34	13 clerks, at \$720.....9,360.00	
Marcy, W. L.....		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Salaries, Bureau of Plant Industry, 1909, \$187,410—Continued.	Salaries, Bureau of Plant Industry, 1910, \$210,510—Continued.	Salaries, Bureau of Plant Industry, 1911, \$255,270—Continued.
Gochenour, W. P. Clerk, class three..... \$1,600.00	8 clerks, messengers, or laborers, at \$660 each..... \$5,280.00	33 clerks, class one (increase of 2 by transfer from lump fund for general expenses)..... \$39,600.00
Huddleson, S. M. Clerk, class three..... 1,600.00	15 clerks, messengers, or laborers, at \$600 each..... 9,000.00	1 seed clerk and superintendent.... 1,200.00
Saunders, B. C. Clerk, class three..... 1,400.00	1 assistant photographer..... 600.00	1 clerk..... 1,080.00
Albee, R. S. Clerk, class two..... 1,400.00	1 carpenter..... 900.00	2 clerks, at \$1,020 each (1 by transfer from lump fund for general expenses and 1 by transfer from lump fund for seeds)..... 2,040.00
Ball, W. A. Clerk, class two..... 1,400.00	1 carpenter..... 840.00	19 clerks, at \$1,000 each..... 19,000.00
Cox, W. P. Clerk, class two..... 1,400.00	2 gardeners or assistants, at \$1,000 each..... 2,000.00	19 clerks, at \$900 each (increase of 4 by transfer from lump fund for general expenses)..... 17,100.00
Davenport, L. H. Clerk, class two..... 1,370.84	6 gardeners, at \$900 each..... 5,400.00	16 clerks, at \$840 each..... 13,440.00
Murphy, Jessie A. Clerk, class two..... 19.44	2 gardeners, at \$840 each..... 1,680.00	1 clerk..... 800.00
Garton, A. C. Clerk, class two..... 1,341.66	4 gardeners, at \$780 each..... 3,120.00	31 clerks, messengers, or laborers, at \$720 each (change in designation and increase of 18, of whom 9 are by transfer from lump fund for general expenses, 1 by transfer from lump fund for seeds, and 8 are in lieu of 8 skilled laborers, at \$720 dropped)..... 22,320.00
Shepherd, A. C. Clerk, class two..... 58.33	5 gardeners, at \$720 each..... 3,600.00	16 clerks, messengers, or laborers, at \$660 each (increase of 8 by transfer from lump funds, being 5 from general expenses and 3 from seeds). 10,560.00
Kinney, Anna H. B. Clerk, class two..... 1,400.00	3 gardeners, at \$660 each..... 1,980.00	30 clerks, messengers, or laborers, at \$600 each (increase of 15, 14 by transfer from lump fund for general expenses and 1 in lieu of 1 assistant photographer dropped). 18,000.00
Lane, K. W. Clerk, class two..... 1,400.00	1 gardener..... 600.00	NOTE.—One carpenter at \$900 and one carpenter at \$840 transferred to Secretary's roll.
McClure, Mary M. Clerk, class two..... 1,400.00	1 skilled laborer..... 900.00	1 gardener (by transfer from lump fund for general expenses)..... 1,200.00
Meloy, F. E. Clerk, class two..... 1,400.00	1 skilled laborer..... 840.00	1 gardener (by transfer from lump fund for general expenses)..... 1,100.00
Meloy, Guy S. Clerk, class two..... 1,400.00	1 painter..... 840.00	2 gardeners or assistants, at \$1000 each..... 2,000.00
Oberly, Eunice R. Clerk, class two..... 1,400.00	2 plumbers, at \$840 each..... 1,680.00	6 gardeners, at \$900 each..... 5,400.00
Passmore, D. G. Clerk, class two..... 1,400.00	8 skilled laborers, at \$720 each..... 5,760.00	2 gardeners, at \$840 each..... 1,680.00
Reed, Charles W. Clerk, class two..... 1,400.00	4 skilled laborers, at \$540 each..... 2,160.00	4 gardeners, at \$780 each..... 3,120.00
Allen, Jessie M. Clerk, class one..... 1,200.00	14 skilled laborers, messengers, or messenger boys, at \$480 each..... 6,720.00	8 gardeners, at \$720 each (increase of 2 by transfer from lump fund for general expenses, and 1 by transfer from lump fund for seeds). 5,760.00
Bailey, R. V. Clerk, class one..... 1,200.00	4 messenger boys, at \$360 each..... 1,440.00	3 gardeners, at \$660 each..... 1,980.00
Barber, Horace W. Clerk, class one..... 66.67	3 messenger boys, at \$300 each..... 900.00	1 gardener..... 600.00
Woolverton, Pearl Clerk, class one..... 1,130.00	Total amount of above appropriation (an increase over 1909 of \$23,100)..... 210,510.00	1 skilled laborer..... 900.00
Caruthers, R. P. Clerk, class one..... 1,200.00		3 skilled laborers, at \$840 each (increase of 2 by transfer from lump fund for general expenses)..... 2,520.00
Church, Lillian Clerk, class one..... 550.00		NOTE.—One painter at \$840 and two plumbers at \$840 transferred to Secretary's roll.
McLaughlin, F. M. Clerk, class one..... 100.00		NOTE.—Eight skilled laborers at \$720 dropped, included with clerks, messengers, etc., at \$720.
Quirk, Agnes Clerk, class one..... 350.00		6 skilled laborers, at \$540 each (increase of 2, 1 by transfer from lump fund for general expenses, and 1 from lump fund for seeds)..... 3,240.00
Coit, Jennie L. Clerk, class one..... 1,200.00		19 skilled laborers, messengers, or messenger boys, at \$480 each (increase of 5 by transfer from lump fund for general expenses)..... 9,120.00
Collier, William Clerk, class one..... 1,200.00		3 laborers or charwomen, at \$480 each (by transfer from lump fund for general expenses)..... 1,440.00
Cramer, Grace M. Clerk, class one..... 1,200.00		1 laborer or charwoman (by transfer from lump fund for general expenses)..... 360.00
Gary, Kate F. Clerk, class one..... 1,200.00		2 laborers, at \$420 each (by transfer from lump fund for seeds)..... 840.00
Goll, F. L. Clerk, class one..... 100.00		6 charwomen, at \$240 each (by transfer from lump fund for general expenses)..... 1,440.00
Warner, M. F. Clerk, class one..... 1,053.33		4 messenger boys, at \$360 each..... 1,440.00
Gordon, Edith F. Clerk, class one..... 1,200.00		3 messenger boys, at \$300 each..... 900.00
Gorman, M. J. Clerk, class one..... 200.00		Total amount estimated (an apparent increase over 1910 of \$44,760)..... 255,270.00
McQuinn, H. L. Clerk, class one..... 950.00		NOTE.—Sixty-one places, aggregating \$43,200, have been added by transfer from the lump fund for general expenses, as follows:
Graham, J. P. Clerk..... 1,200.00		2 executive assistants, at \$1,800 each..... 3,600.00
Grant, Charles V. Clerk, class one..... 1,200.00		
Herrick, Emma C. Clerk, class one..... 1,200.00		
Hicks, E. E. Clerk, class one..... 1,200.00		
Higgins, F. A. Clerk, class one..... 1,200.00		
McDonnell, E. E. Clerk, class one..... 1,200.00		
Moise, Frederic S. Clerk, class one..... 1,200.00		
Morrison, G. W. Clerk, class one..... 150.00		
Romig, L. H. Clerk, class one..... 950.00		
Newton, A. A. Clerk, class one..... 1,200.00		
Parker, S. M. Clerk, class one..... 1,200.00		
Price, Nellie V. Clerk, class one..... 1,200.00		
Quirk, Agnes Clerk, class one..... 360.00		
Shepherd, A. C. Clerk, class one..... 840.00		
Schutt, Ellen I. Clerk, class one..... 1,198.33		
Smith, L. J. Clerk, class one..... 1,200.00		
Sweet, M. L. Clerk, class one..... 1,200.00		
Taylor, Thomas C. Clerk, class one..... 1,200.00		
Williams, A. H. Clerk, class one..... 1,200.00		
Clements, Charles A., Jr. Seed clerk and superintendent, at \$1,200..... 76.67		
Estler, H. S. Clerk or artist, at \$1,200..... 500.00		
Stein, Lewis E. Clerk or artist, at \$840..... 556.67		
Austin, Ella M. Clerk or artist, at \$840..... 315.00		
Austin, Mary A. Clerk or artist, at \$840..... 315.00		
Wulfert, Margaret A. Clerk, at \$1,080..... 405.00		
Adams, Charles W. Clerk, at \$1,080..... 225.00		
Estler, H. S. Clerk, at \$1,080..... 315.00		
McQuinn, H. L. Clerk, at \$1,080..... 315.00		
Morrison, G. W. Clerk, at \$1,080..... 315.00		
Adams, Charles W. Clerk, at \$1,000..... 537.51		
Carmack, Edward D. Clerk, at \$1,000..... 125.01		
Dismukes, G. C. Clerk, at \$1,000..... 55.56		
Estler, H. S. Clerk, at \$1,000..... 208.33		
Allen, Clyde W. Clerk, at \$1,000..... 330.56		
Bechtold, Frank E. Clerk, at \$1,000..... 644.45		
Ashmore, C. D. Clerk, at \$1,000..... 1,000.00		
Atwood, Alice C. Clerk, at \$1,000..... 1,000.00		
Bagley, M. H. Clerk, at \$1,000..... 1,000.00		
Baxter, Mary A. Clerk, at \$1,000..... 1,000.00		
Corrick, H. K. Clerk, at \$1,000..... 1,000.00		
Dundas, John M. Clerk, at \$1,000..... 416.67		
Hudson, Agnes T. Clerk, at \$1,000..... 577.78		
Escavaille, C. L. Clerk, at \$1,000..... 1,000.00		
Howell, Edna D. Clerk, at \$1,000..... 1,000.00		
Johnston, Gertrude M. Clerk, at \$1,000..... 1,000.00		
Kolek, Rachel M. Clerk, at \$1,000..... 969.44		
MacMorris, Laura Clerk, at \$1,000..... 1,000.00		
Phelps, Nora H. Clerk, at \$1,000..... 1,000.00		
Sawyer, Alice M. Clerk, at \$1,000..... 1,000.00		
Zell, Carrie Clerk, at \$1,000..... 1,000.00		
Atkinson, Edwin D. Clerk, at \$900..... 900.00		
Burke, Edmund Clerk, at \$900..... 900.00		
Daniels, Milton R. Clerk, at \$900..... 900.00		
Dewdney, Marie V. Clerk, at \$900..... 900.00		
Holland, J. D. Clerk, at \$900..... 900.00		
Ross, Matilda Clerk, at \$900..... 900.00		
Alexander, Emma C. Clerk, at \$840..... 35.00		
Ammen, Mathilde Clerk, at \$840..... 88.67		
Fitzpatrick, Beulah Clerk, at \$840..... 226.33		
Thomson, M. G. Clerk, at \$840..... 490.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Plant Industry, 1909, \$187,410—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1910, \$210,510—Continued.</i>	<i>Salaries, Bureau of Plant Industry, 1911, \$255,270—Continued.</i>
Anderson, M. N.		2 clerks, class two \$2,800.00
Bell, B. C.	Clerk, at \$840. 385.00	2 clerks, class one 2,400.00
Welborn, Ella.	315.00	1 clerk 1,020.00
Connor, Bernard.	Clerk, at \$840. 840.00	4 clerks, at \$900 each. 3,600.00
Curtin, Grace M.	Clerk, at \$840. 60.67	9 clerks, messengers, or laborers, at \$720 each. 6,480.00
Ballard, Clara E.	770.00	5 clerks, messengers, or laborers, at \$600 each. 3,000.00
Graham, Grace.	Clerk, at \$840. 840.00	14 clerks, messengers, or laborers, at \$600 each. 8,400.00
Hall, C. L.	Clerk, at \$840. 840.00	1 gardener. 1,200.00
Lewis, Ella.	Clerk, at \$840. 840.00	1 gardener. 1,100.00
Martin, Alice R.	Clerk, at \$840. 105.00	2 gardeners, at \$720 each. 1,440.00
McDowell, Harry P.	700.00	2 skilled laborers, at \$840 each. 1,680.00
Palmer, W. L.	Clerk, at \$840. 840.00	1 skilled laborer. 540.00
Sliter, Emmalyn L.	Clerk, at \$840. 840.00	5 skilled laborers, messengers, or messenger boys, at \$180 each. 2,400.00
Tyler, Clara H.	Clerk, at \$840. 840.00	3 laborers or charwomen, at \$480 each. 1,440.00
Weaver, Elizabeth I.	Clerk, at \$840. 840.00	1 laborer or charwoman. 360.00
Alexander, Emma C.	66.66	6 charwomen, at \$240 each. 1,440.00
Ballard, Clara E.	Clerk, at \$800. 500.00	
Hurdle, Ivy V.	162.23	Nine places, aggregating \$5,820, have been added by transfer from the lump fund for seeds, as follows:
McQueen, Lillian.	210.00	1 clerk 1,020.00
Alexander, Emma C.	Clerk, at \$720. 450.00	1 clerk, messenger, or laborer. 720.00
Smith, Pearl R.	60.00	1 gardener. 720.00
Wulfert, Margaret A.	180.00	3 clerks, messengers, or laborers, at \$660 each. 1,980.00
Boree, Burt C.	Clerk, at \$720. 148.00	1 skilled laborer. 540.00
LaRue, Charles O.	360.00	2 laborers, at \$420 each. 840.00
Palmer, Jassamine L.	Clerk, at \$720. 720.00	
Bragdon, C. K.	Clerk, at \$720. 420.00	
Chandler, H. F.	Clerk, at \$720. 252.00	Five places, aggregating \$4,260, have been omitted by transfer to the Secretary's roll, as follows:
Colne, Harriet.	Clerk, at \$720. 557.00	1 carpenter 900.00
Thomson, M. G.	Clerk, at \$720. 150.00	1 carpenter. 840.00
Hardenstein, F. P.	Clerk, at \$720. 450.00	1 painter. 840.00
Smith, Lucy.	Clerk, at \$720. 270.00	2 plumbers, at \$840 each. 1,680.00
Downes, M. A.	Clerk, at \$720. 630.00	
Hurdle, Ivy V.	Clerk, at \$720. 30.00	
Harvey, Rose A.	Clerk, at \$720. 60.00	
Klett, Anna C.	Clerk, at \$720. 60.00	
Nance, Nell W.	Clerk, at \$720. 636.00	
McQueen, Lillian.	Clerk, at \$720. 720.00	
Muhleman, B. M.	Clerk, at \$720. 720.00	
Millett, Eugene.	Clerk, at \$720. 254.00	
Peacock, Eva M.	Clerk, at \$720. 450.00	
Roberts, Harry.	Clerk, at \$720. 276.83	
Welborn, Ella.	55.00	
Allen, Anna M.	Clerk, at \$660. 110.00	
Harvey, Rose A.	Clerk, at \$660. 165.00	
LaRue, Charles O.	Clerk, at \$660. 110.00	
Staves, Marion C.	Clerk, at \$660. 166.83	
Boree, Burt C.	Clerk, at \$660. 187.00	
Kautz, Selma I.	Clerk, at \$660. 55.00	
Lynch, John T.	Clerk, at \$660. 247.50	
Muhleman, B. M.	Clerk, at \$660. 137.50	
Downes, M. A.	Clerk, at \$660. 275.00	
Harrison, Bessie K.	Clerk, at \$660. 650.83	
Waters, Sarah.	Clerk, at \$660. 83.33	
Veihmeyer, Frank J.	Clerk, at \$660. 16.67	
Allen, Anna M.	Clerk, at \$600. 326.67	
Beecher, Katherine H.	Clerk, at \$600. 166.67	
Haines, Hazel.	Clerk, at \$600. 600.00	
Watskey, Jake.	Clerk, at \$600. 225.00	
Barber, E. E.	Clerk, at \$600. 275.00	
Clyne, James V.	Clerk, at \$600. 375.00	
Coleman, E. H.	Clerk, at \$600. 225.00	
Owen, Abbie.	Clerk, at \$600. 112.50	
Waters, Sarah.	Clerk, at \$600. 450.00	
Austin, Mary A.	Photographer or clerk, at \$900. 150.00	
Creswell, Charles F.	Assistant photographer, at \$600. 600.00	
Prentiss, A. M.	Illustrator or clerk, at \$900. 787.50	
Ruark, A. A.	Carpenter, at \$900. 107.50	
Lower, Elsie E.	Carpenter, at \$840. 900.00	
Martin, Alice R.	Gardener, at \$1,000. 830.67	
Schneider, Mary M.	Gardener, at \$1,000. 1,000.00	
Walter, R. B.	Gardener, at \$900. 900.00	
Smith, W. A.	Gardener, at \$900. 900.00	
Bisset, David.	Gardener, at \$900. 900.00	
Gauges, Joseph A.	Gardener, at \$900. 900.00	
Bullen, Harry.	Gardener, at \$900. 900.00	
Dawson, John P.	Gardener, at \$900. 900.00	
Keller, Charles.	Gardener, at \$900. 900.00	
Kerr, J. K., sr.	Gardener, at \$900. 900.00	
Klopfer, Henry.	Gardener, at \$900. 900.00	
Quinn, James.	Gardener, at \$900. 900.00	
Byrnes, J. Wise.	Gardener, at \$840. 840.00	
Ecton, Thomas G.	Gardener, at \$840. 840.00	
Boyle, Harry H.	Gardener, at \$780. 780.00	
Haase, Henry F.	Gardener, at \$780. 780.00	
Hauser, Ernest.	Gardener, at \$780. 780.00	
Jolliff, Jesse O.	Gardener, at \$780. 780.00	
Fraile, M.	Gardener, at \$720. 720.00	
Graner, Mike.	Gardener, at \$720. 720.00	
Haws, Henry.	Gardener, at \$720. 720.00	
Hull, W. S.	Gardener, at \$720. 60.00	
Zoellner, H. G.	Gardener, at \$720. 548.00	
Kletsch, Ernest.	Gardener, at \$720. 720.00	
Evans, W. D.	Gardener, at \$660. 660.00	
Lucas, W. R.	Gardener, at \$660. 660.00	
Paget, Wilmer J.	Gardener, at \$660. 660.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Plant Industry, 1909. \$157,410—Continued.</i>		
May, Eugene, Jr.....	Gardener, at \$600.....	\$600.00
Maxwell, G. R.....	Skilled laborer, at \$900.....	900.00
Orton, W. S., sr.....	Painter, at \$840.....	840.00
Kerr, James K., jr.....	Plumber, at \$840.....	840.00
Schubert, Charles J.....	Plumber, at \$840.....	840.00
Graeff, Peter B.....	Clerk, at \$840.....	140.00
Storhart, T. B.....	Clerk, at \$840.....	501.67
Mason, Charles S.....	Clerk, at \$840.....	163.33
Smith, Lucy.....	Clerk, at \$840.....	665.00
Bryant, R. A.....	Skilled laborer, at \$720.....	720.00
Duffy, Sadie.....	Skilled laborer, at \$720.....	720.00
Frazier, C. T.....	Skilled laborer, at \$720.....	692.00
Kelly, J. W.....	Skilled laborer, at \$720.....	720.00
Page, J. E.....	Skilled laborer, at \$720.....	720.00
Scanlon, P.....	Skilled laborer, at \$720.....	720.00
Schultheis, W. H.....	Skilled laborer, at \$720.....	720.00
Smith, Mary J.....	Skilled laborer, at \$720.....	708.00
Willis, W. E.....	Skilled laborer, at \$720.....	720.00
Cookman, G. E.....	Skilled laborer, at \$660.....	660.00
Cutshall, G. W.....	Skilled laborer, at \$660.....	660.00
Minor, G. O.....	Skilled laborer, at \$660.....	660.00
Colne, Harriet.....	Skilled laborer, at \$600.....	100.00
Cutting, Julia M.....	Skilled laborer, at \$600.....	13.33
Edelen, Eoline K.....	Skilled laborer, at \$600.....	350.00
La Rue, Chas. O.....	Skilled laborer, at \$600.....	25.00
Davis, Hugh M.....	Skilled laborer, at \$600.....	50.00
Hull, W. S.....	Skilled laborer, at \$600.....	500.00
Disney, R. H.....	Skilled laborer, at \$600.....	600.00
Franklin, C. D.....	Skilled laborer, at \$600.....	600.00
Hammersley, J. J.....	Skilled laborer, at \$600.....	600.00
Lee, Frank.....	Skilled laborer, at \$600.....	600.00
Massie, Mattie L.....	Skilled laborer, at \$600.....	600.00
Portis, E. M.....	Skilled laborer, at \$600.....	438.33
Trotter, Stance J.....	Skilled laborer, at \$600.....	131.67
Allen, Tibbett.....	Skilled laborer, at \$540.....	540.00
Clinkett, Isaac.....	Skilled laborer, at \$540.....	540.00
Gordon, John C.....	Skilled laborer, at \$540.....	540.00
Rand, Clara C.....	Messenger, at \$660.....	660.00
Pierce, J. F.....	Messenger, at \$600.....	600.00
Taylor, J. A.....	Messenger, at \$600.....	600.00
Winkler, J. H.....	Messenger, at \$600.....	600.00
Brodie, C. E.....	Messenger, at \$480.....	480.00
Etheridge, J. W.....	Messenger, at \$480.....	480.00
Frost, Fred C.....	Messenger, at \$480.....	480.00
Key, Richard C.....	Messenger, at \$480.....	96.00
Langford, James B.....	Messenger, at \$480.....	354.67
Lynch, Lewis M.....	Messenger, at \$480.....	480.00
Mann, Howard Q.....	Messenger, at \$480.....	480.00
Miller, Walter L.....	Messenger, at \$480.....	354.67
Wahlgren, M. G.....	Messenger, at \$480.....	80.00
Skippon, C. D.....	Messenger, at \$480.....	220.00
Turner, Olan E.....	Messenger, at \$480.....	240.00
Thompson, Elmer.....	Messenger, at \$480.....	480.00
Townsend, Karl H.....	Messenger, at \$480.....	480.00
Legge, Winthrow R.....	Messenger, at \$360.....	15.00
Mehlfiel, Archie W.....	Messenger, at \$360.....	240.00
Weber, Geo. M.....	Messenger, at \$360.....	45.00
Whitlock, Harry T.....	Messenger, at \$360.....	360.00
Clayton, George R.....	Messenger, at \$300.....	125.83
Roby, John Henry.....	Messenger, at \$300.....	164.17
Lewis, C. I. M.....	Messenger, at \$300.....	25.00
Murphy, R. O. D.....	Messenger, at \$300.....	200.00
Sanders, John B.....	Messenger, at \$300.....	73.33
Total.....	155,386.19	
Unexpended balance.....	2,023.81	
Total amount of above appropriation.....	157,410.00	
<i>General expenses, Bureau of Plant Industry, 1909, \$596,366.</i>		
Salaries:		
In Washington.....	\$356,272.03	
Out of Washington.....	222,617.51	
	\$578,889.54	
Traveling and field expenses.....	131,583.39	
Miscellaneous expenses and supplies.....	79,090.34	
Stationery.....	9,843.13	
Furniture.....	10,739.76	
Fuel.....	3,205.36	
Freight.....	1,685.72	
Express.....	2,480.46	
Telegraph.....	765.65	
Telephone.....	768.13	
Rent.....	4,972.35	
	\$766,592.67	
Traveling and field expenses.....	196,503.55	
Miscellaneous expenses and supplies.....	128,400.00	
Stationery.....	12,000.00	
Furniture.....	15,000.00	
Fuel.....	1,500.00	
Freight.....	2,000.00	
Express.....	3,000.00	
Telegraph.....	1,000.00	
	\$739,662.00	
Traveling and field expenses.....	200,000.00	
Miscellaneous expenses and supplies.....	125,900.00	
Stationery.....	12,000.00	
Furniture.....	15,000.00	
Fuel.....	1,500.00	
Freight.....	2,000.00	
Express.....	3,000.00	
Telegraph.....	1,000.00	
	\$739,662.00	
<i>General expenses, Bureau of Plant Industry, 1910, \$1,159,075.93.^a</i>		
Salaries:		
In Washington.....	\$364,132.00	
Out of Washington.....	402,460.67	
	\$766,592.67	
Traveling and field expenses.....	196,503.55	
Miscellaneous expenses and supplies.....	128,400.00	
Stationery.....	12,000.00	
Furniture.....	15,000.00	
Fuel.....	1,500.00	
Freight.....	2,000.00	
Express.....	3,000.00	
Telegraph.....	1,000.00	
	\$739,662.00	
Traveling and field expenses.....	200,000.00	
Miscellaneous expenses and supplies.....	125,900.00	
Stationery.....	12,000.00	
Furniture.....	15,000.00	
Fuel.....	1,500.00	
Freight.....	2,000.00	
Express.....	3,000.00	
Telegraph.....	1,000.00	
	\$739,662.00	
<i>General expenses, Bureau of Plant Industry, 1911, \$1,133,346.</i>		
Salaries:		
In Washington.....	\$321,682.00	
Out of Washington.....	417,980.00	
	\$739,662.00	
Traveling and field expenses.....	200,000.00	
Miscellaneous expenses and supplies.....	125,900.00	
Stationery.....	12,000.00	
Furniture.....	15,000.00	
Fuel.....	1,500.00	
Freight.....	2,000.00	
Express.....	3,000.00	
Telegraph.....	1,000.00	
	\$739,662.00	

^a The total amount of the 1910 appropriation, as contained in the act of March 4, 1909, is \$1,180,796. Of this, however, the sum of \$21,720.07 of an immediately available fund of \$50,000 was used during the fiscal year 1909, as indicated in the preceding column. The balance, or \$1,159,075.93, is therefore the actual available appropriation for use during the fiscal year 1910.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.	
<i>General expenses, Bureau of Plant Industry, 1909, \$896,266—Continued.</i>			
Gas and electricity.....	\$3,153.13	Telephone.....	\$1,000.00
Apparatus, instruments, and laboratory material.....	20,773.62	Rent.....	3,500.00
Total expenditures to August 31, 1909.....	\$47,952.58	Gas and electricity.....	3,500.00
Less repayment to credit of appropriation.....	112.84	Apparatus, instruments, and laboratory material.....	25,284.00
Net expenditures to August 31, 1909.....	\$47,839.74	Total amount estimated (an actual decrease from 1910 of \$25,729.93).....	1,133,346.00
Advances to temporary special disbursing agents.....	12,645.52		
Outstanding liabilities on August 31, 1909.....	24,741.06		
Total expenditures and liabilities.....	\$85,226.32		
Balance to be turned back into Treasury.....	11,039.68		
Total amount of above appropriation.....	\$96,266.00		
<i>General expenses, Bureau of Plant Industry, 1909-10, \$21,720.07. ^b</i>			
Salaries:			
In Washington.....	300.00		
Out of Washington.....	13,532.38		
Traveling and field expenses.....	562.46		
Miscellaneous expenses and supplies.....	2,060.42		
Stationery.....	439.82		
Furniture.....	325.65		
Apparatus, instruments, and laboratory material.....	145.74		
Total expenditures to June 30, 1909.....	17,366.47		
Outstanding liabilities on June 30, 1909.....	4,353.60		
Total amount of above appropriation.....	^a 21,720.07		
<i>Paper tests, 1909, \$6,900. ^c</i>			
Salaries in Washington.....	2,534.26		
Traveling and field expenses.....	234.87		
Miscellaneous expenses and supplies.....	970.21		
Stationery.....	90.52		
Furniture.....	25.74		
Freight.....	5.50		
Express.....	14.38		
Telegraph.....	.20		
Apparatus, instruments, and laboratory material.....	510.97		
Total expenditures to August 31, 1909.....	4,386.65		
Outstanding liabilities on August 31, 1909.....	2,505.64		
Total expenditures and liabilities.....	6,892.29		
Balance to be turned back in Treasury.....	7.71		
Total amount of above appropriation.....	^c 6,900.00		
<i>Pomological investigations, 1906, fund from the sale of fruits \$768.12. ^e</i>			
Traveling and field expenses.....	519.39		
Miscellaneous expenses and supplies.....	168.60		
Freight.....	34.94		
Express.....	45.09		
Total expenditures during fiscal year 1909.....	768.02		
Balance turned back into Treasury.....	.10		
Total amount of above appropriation.....	^d 768.12		
<i>Purchase and distribution of valuable seeds, 1909, \$258,000.</i>			
Salaries:			
In Washington.....	\$54,252.85		
Out of Washington.....	8,709.89		
Traveling and field expenses.....	\$62,962.74		
Miscellaneous expenses and supplies.....	8,260.82		
Stationery.....	136,542.82		
Furniture.....	1,741.28		
Fuel.....	846.92		
Freight.....	150.00		
Express.....	2,943.07		
Telegraph.....	812.23		
Telephone.....	164.10		
Rent.....	90.45		
	4,232.50		
<i>Purchase and distribution of valuable seeds, 1910, \$317,960.</i>			
Salaries:			
In Washington.....	\$55,340.00		
Out of Washington.....	8,250.00		
Traveling and field expenses.....	\$63,590.00		
Miscellaneous expenses and supplies.....	21,420.00		
Stationery.....	216,900.00		
Furniture.....	2,500.00		
Fuel.....	1,200.00		
Freight.....	200.00		
Express.....	3,750.00		
Telegraph.....	1,200.00		
Telephone.....	200.00		
	100.00		
<i>Purchase and distribution of valuable seeds, 1911, \$309,590.</i>			
Salaries:			
In Washington.....	\$49,520.00		
Out of Washington.....	8,500.00		
Traveling and field expenses.....	\$58,020.00		
Miscellaneous expenses and supplies.....	22,000.00		
Stationery.....	213,520.00		
Furniture.....	2,500.00		
Fuel.....	1,200.00		
Freight.....	200.00		
Express.....	3,750.00		
Telegraph.....	1,200.00		
Telephone.....	200.00		
	100.00		

^a The total amount of the 1910 appropriation, as contained in the act of March 4, 1909, is \$1,189,796. Of this, however, the sum of \$21,720.07 of an immediately available fund of \$50,000 was used during the fiscal year 1909, as indicated in the preceding column. The balance, or \$1,159,075.93, is therefore the actual available appropriation for use during the fiscal year 1910.

^b Being the amount used of an immediately available appropriation.

^c Being an allotment from an appropriation of \$10,000 used jointly by the Bureau of Plant Industry and the Forest Service.

^d Being the amount used from an appropriation of \$10,000. The remainder is assigned to the Forest Service, the paper-testing work of this bureau now being carried on under a separate subappropriation on the fund for general expenses, Bureau of Plant Industry, 1910.

^e Being the balance (available until used) left from the fund raised during the fiscal year 1906 through the sale of fruits and vegetables, in accordance with the appropriation act for that year.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Purchase and distribution of valuable seeds, 1909, \$258,000—Continued.</i>	<i>Purchase and distribution of valuable seeds, 1910, \$317,960—Continued.</i>	<i>Purchase and distribution of valuable seeds, 1911, \$309,590—Continued.</i>
Gas and electricity..... \$65.46	Rent..... \$4,800.00	Rent..... \$4,800.00
Apparatus, instruments, and laboratory material..... 1,478.49	Gas and electricity..... 100.00	Gas and electricity..... 100.00
Total expenditures to August 31, 1909..... 220,290.88	Apparatus, instruments, and laboratory material..... 2,000.00	Apparatus, instruments, and laboratory material..... 2,000.00
Less repayment to credit of appropriation..... 4.82	Total amount of above appropriation (an increase over 1909 of \$59,960)..... 317,960.00	Total amount estimated (a decrease from 1910 of \$8,370)..... 309,590.00
Net expenditures to August 31, 1909..... 220,286.06		
Advances to temporary special disbursing agents..... 28,118.93		
Outstanding liabilities on August 31, 1909..... 8,590.25		
Total expenditures and liabilities..... 256,995.24		
Balance to be turned back in Treasury..... 1,004.76		
Total amount of above appropriation..... 258,000.00		

NOTE.—The above estimated decrease is due to the transfer of funds, as follows: \$5,820 to the statutory roll of the Bureau of Plant Industry, and \$2,550 to the funds of the office of the Secretary, on account of the centralization of mechanical work.

OFFICES, LABORATORIES, AND PROJECTS.

OFFICES OF ADMINISTRATION.	OFFICES OF ADMINISTRATION.	OFFICES OF ADMINISTRATION.
(Beverly T. Galloway, chief of bureau. Albert F. Woods, assistant chief of bureau.)	(Beverly T. Galloway, chief of bureau. Albert F. Woods, assistant chief of bureau.)	(Beverly T. Galloway, chief of bureau. Albert F. Woods, assistant chief of bureau.)
Salaries, statutory..... \$56,267.74	Salaries, statutory..... \$65,430.00	Salaries, statutory..... \$71,370.00
Salaries, lump fund..... 19,953.83	Salaries, lump fund..... 17,940.00	Salaries, lump fund..... 12,000.00
Miscellaneous expenses and supplies..... 11,901.85	Miscellaneous expenses and supplies..... 18,072.00	Miscellaneous expenses and supplies..... 16,647.00
Traveling expenses..... 666.67	Traveling expenses..... 1,000.00	Traveling expenses..... 1,000.00
Total..... 88,790.09	Total..... 102,442.00	Total..... 101,017.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Office of chief of bureau..... 28,550.09	(1) Office of chief of bureau..... 36,642.00	(1) Office of chief of bureau..... 35,217.00
This project includes the correspondence and general administrative work of the office, including appointments and other changes in grade of the personnel; the preparation of pay rolls; the various other necessary details connected with the administration of the work of the bureau. The compilation of reports for congressional and other use is also included under this project.		
(2) Office of assistant chief of bureau..... 22,400.00	(2) Office of assistant chief of bureau..... 22,880.00	(2) Office of assistant chief of bureau..... 22,880.00
This project includes the correspondence and general administrative work conducted by the assistant chief of bureau, including the planning and recording of projects, cooperative agreements with stations, etc.; filing and indexing of the correspondence of the bureau; and various other necessary details connected with the work falling under the immediate direction of the assistant chief of bureau.		
(3) Office of records (auditing and accounting)..... 15,300.00	(3) Office of records (auditing and accounting)..... 16,265.00	(3) Office of records (auditing and accounting)..... 16,265.00
This project includes all of the financial operations of the bureau, such as the keeping of accounts, the auditing of vouchers for traveling and other expenses, the recording of contracts and leases, letters of authorization for travel, etc. The manifolded of circular letters for all of the offices of the bureau is also included under this project.		
(4) Office of supplies and property..... 6,920.00	(4) Office of supplies and property..... 9,320.00	(4) Office of supplies and property..... 9,320.00
This project includes all work connected with the purchase, delivery, and recording of all supplies and property of the bureau; the drawing of requisitions; the preparation of inventories, etc. All laboratory and field equipment and miscellaneous supplies of the bureau are secured through this office.		
(5) Editorial office..... 4,040.00	(5) Editorial office..... 5,540.00	(5) Editorial office..... 5,540.00
This project includes the preparation of manuscript for the printer, the proof reading of publications, the preparation of indexes, and various other necessary details connected with the issuance and distribution of the publications of the bureau. All of this work is carried on in cooperation with the division of publications of the department.		
(6) Library, translating, and abstracting work..... 4,580.00	(6) Library, translating, and abstracting work..... 4,580.00	(6) Library, translating, and abstracting work..... 4,580.00
This project includes the maintenance of a branch library of pathological, physiological, and other plant literature, as an aid to the investigators of the bureau; also the translating and abstracting of such literature, the keeping of catalogues, etc. All of this work is carried on in cooperation with the library of the department.		
(7) Correspondence and accounting, congressional seed distribution..... 7,000.00	(7) Correspondence and accounting, congressional seed distribution..... 7,215.00	(7) Correspondence and accounting, congressional seed distribution..... 7,215.00
This project includes the carrying on of correspondence relating to the congressional distribution of seeds and plants, the keeping of accounts of the allotments to each Congressman, the counting of addressed franks, and other necessary details connected with the distribution which are handled in the administrative offices of the bureau.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.) Salaries, statutory..... \$2,928.39 Salaries, lump fund..... 11,982.33 Miscellaneous expenses and supplies..... 3,478.14 Traveling and field expenses..... 1,058.06 Total..... 19,446.92	LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.) Salaries, statutory..... \$2,040.00 Salaries, lump fund..... 13,430.00 Miscellaneous expenses and supplies..... 3,360.00 Traveling and field expenses..... 1,250.00 Total..... 20,080.00	LABORATORY OF PLANT PATHOLOGY. (Erwin F. Smith, pathologist in charge.) Salaries, statutory..... \$2,700.00 Salaries, lump fund..... 12,780.00 Miscellaneous expenses and supplies..... 3,300.00 Traveling and field expenses..... 1,200.00 Total..... 19,980.00
PROJECT. Central laboratory of plant pathology..... 19,446.92 <p>This is the working laboratory for all of the pathological investigations of the bureau, as described in the following pages. The laboratory work at the present time includes the study of the causes of diseases of the sugar cane, coconut, cotton, corn, potato, tomato, cucumber, bean, squash, cabbage, tobacco, olive, peach, plum, carnation, chrysanthemum, begonia, and many other plants. Material from all parts of the United States is examined and advice for treatment given.</p> <p><i>Results.</i>—A number of special studies of various bacterial and other diseases have been made. Two bulletins have recently been issued, one on the olive tubercle, the other on the Granville tobacco wilt. Studies of the crown-gall diseases of various plants have been continued by the pathologists. The cause has been determined, and farmers have been advised against planting trees infected with crown galls, since they are not likely to make durable orchards, and, moreover, will distribute infection where it does not now exist. A bulletin giving advice on this subject has been issued.</p> <p>Experiments on the bacterial brown rot of potatoes, tomatoes, and eggplant have shown beyond doubt that the organism enters the plant very readily through broken roots, and for this reason it is advised in transplanting tomatoes and the other plants mentioned to use young plants and exercise great care not to injure the root system.</p> <p>Experiments have shown that Stewart's bacterial disease of sweet corn is readily propagated on the seed, probably almost exclusively in this way, and that exposure of the dry kernels of sweet corn to one part, by weight, of mercuric chloride in one thousand parts of water for a period of twenty minutes will destroy the bacteria without injury to the germination. This method of disinfection is recommended for general use in connection with the planting of sweet corn, since this disease is becoming widely prevalent.</p>	PROJECT. Central laboratory of plant pathology..... 20,080.00	PROJECT. Central laboratory of plant pathology..... 19,980.00
PATHOLOGICAL COLLECTIONS AND INSPECTION WORK. (Flora W. Patterson, mycologist in charge.) Salaries, statutory..... \$1,860.00 Salaries, lump-fund..... 3,200.00 Miscellaneous expenses and supplies..... 321.00 Total..... 5,381.00	PATHOLOGICAL COLLECTIONS AND INSPECTION WORK. (Flora W. Patterson, mycologist in charge.) Salaries, statutory..... \$1,920.00 Salaries, lump-fund..... 3,200.00 Miscellaneous expenses and supplies..... 1,230.00 Total..... 6,350.00	PATHOLOGICAL COLLECTIONS AND INSPECTION WORK. (Flora W. Patterson, mycologist in charge.) Salaries, statutory..... \$1,920.00 Salaries, lump-fund..... 3,200.00 Miscellaneous expenses and supplies..... 1,230.00 Total..... 6,350.00
PROJECTS. (1) Pathological collections..... 1,870.58 <p>The importance of maintaining as complete a collection of pathogenic and related species as possible as an aid to the pathological workers of the bureau is very great and this necessity is too well recognized to require argument.</p> <p><i>Results.</i>—The collections are constantly studied by the pathologists of the bureau while in Washington or by the mycologist in charge of the collections, in compliance with the requests of field investigators of the bureau for information which can only be gained by the critical study of the material they wish examined. Pathologists connected with the state experiment stations and other educational institutions frequently visit the collections for assistance in the solution of their local problems.</p> <p>Cooperative problems have been frequently assigned to this office, one just completed having been undertaken at the request of the Hawaiian Experiment Station in the interest of the pineapple industry. Experiments conducted to determine the value of formalin as an agent for killing the spores of <i>Thielaviopsis</i> on pineapples have been completed. The principal object of the investigation—the death point of the spores—has been determined, and the practical application of the information acquired is now receiving attention.</p>	PROJECTS. (1) Pathological collections..... 2,776.67	PROJECTS. (1) Pathological collections..... 2,776.67

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
PATHOLOGICAL COLLECTIONS AND INSPECTION WORK—Continued.	PATHOLOGICAL COLLECTIONS AND INSPECTION WORK—Continued.	PATHOLOGICAL COLLECTIONS AND INSPECTION WORK—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Mycological and host indexes of new species..... \$1,240.00 The main objects in maintaining these indexes are to show what specimens are in the collections available for comparison, what fungi affect certain host plants, and the geographical distribution of certain diseases. <i>Results.</i> —The value of the results derived from the maintenance of these indexes is shown by the numerous requests of scientific workers, both in this country and abroad, for such information as is brought together by this means. References to recent monographs are given on the cards in the indexes, and data relating to the latest investigations are thereby readily accessible to all workers.	(2) Mycological and host indexes of new species..... \$1,253.33	(2) Mycological and host indexes of new species..... \$1,253.33
(3) Mycological exchange..... 800.00 The object of this work is to aid experiment-station workers, specialists, and all others interested in the study of fungi from the economic standpoint. This is one of the most valuable methods of obtaining without purchase pathological material of wide geographical range. Cooperation with foreign exchanges is also practiced. <i>Results.</i> —Much valuable material has accrued to the department from this source. The popularity of this method has exceeded expectations and makes a second edition of the exchange list very desirable.	(3) Mycological exchange..... 803.33	(3) Mycological exchange..... 803.33
(4) Identification of pathological material..... 960.00 This work includes both material received from correspondents and that referred for critical identification by the pathological workers of the bureau. Material received through the plant-disease survey of the bureau is also studied and preserved for reference. <i>Results.</i> —By means of this work innumerable fungous diseases are annually identified for correspondents and remedies suggested. The attention given to requests for assistance from experiment-station workers, on critical or difficult problems, preliminary to their published reports, forms no small part of the work. Several new economic troubles of importance have been determined and described.	(4) Identification of pathological material..... 983.34	(4) Identification of pathological material..... 983.34
(5) Pathological inspection work..... 510.42 The object of this work is to prevent the introduction or spread of new or serious fungous diseases by means of plants handled by the department. The work covers both the extensive collections of plants in the department greenhouses for congressional and special distribution, and the seed and plant material received and distributed by the Office of Foreign Seed and Plant Introduction. <i>Results.</i> —Several serious troubles have been discovered on importations or prospective exportations, and measures taken by which they were satisfactorily combated or entirely eradicated. As a preventive measure advice is given regarding diseases of foreign plants which might be selected for importation. Thus the plant introducer is kept informed of possible dangers to our prospective importations, and so enabled to make judicious selections.	(5) Pathological inspection work... 533.33	(5) Pathological inspection work... 533.33
FRUIT DISEASE INVESTIGATIONS. (Merton B. Waite, pathologist in charge.)	FRUIT DISEASE INVESTIGATIONS. (Merton B. Waite, pathologist in charge.)	FRUIT DISEASE INVESTIGATIONS. (Merton B. Waite, pathologist in charge.)
Salaries, statutory..... \$1,276.34	Salaries, statutory..... \$2,220.00	Salaries, statutory..... \$2,220.00
Salaries, lump fund..... 20,052.09	Salaries, lump fund..... 20,050.00	Salaries, lump fund..... 20,380.00
Miscellaneous expenses and supplies..... 1,756.16	Miscellaneous expenses and supplies..... 5,600.00	Miscellaneous expenses and supplies..... 5,245.00
Traveling and field expenses..... 8,829.74	Traveling and field expenses..... 9,050.00	Traveling and field expenses..... 9,050.00
Total..... 31,914.33	Total..... 36,920.00	Total..... 36,895.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General office and laboratory work..... 5,073.58 This project includes the necessary routine office and laboratory work in connection with the field investigations; the carrying on of correspondence; the indexing and care of specimens; and other similar work. <i>Results.</i> —The results under this project are reflected in the progress noted under the other projects, described in the following paragraphs. They also consist in the dissemination of information and new discoveries as to the treatment of orchard diseases throughout the country.	(1) General office and laboratory work..... 6,420.00	(1) General office and laboratory work..... 6,395.00
(2) Eradication of pear blight..... 4,481.66 This work was originally started in the South, but is now conducted in California, Oregon, and to some extent in other Western States, with a view to preventing the destruction of the pear orchards of those States, which are valued at many millions of dollars. Pear blight has been and is devastating these orchards, and the department, in cooperation with the state authorities, has been working to check its spread. The work consists of practical orchard demonstrations of methods of eradicating the blight.	(2) Eradication of pear blight..... 5,000.00	(2) Eradication of pear blight..... 5,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FRUIT DISEASE INVESTIGATIONS—Continued.	FRUIT DISEASE INVESTIGATIONS—Continued.	FRUIT DISEASE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—In Georgia and Texas, where this work was started, it was demonstrated that blight could be controlled by proper cutting out of the hold-over blight. In California and southern Oregon good results have been obtained on a large scale and many orchards—in some cases entire districts—have been saved from destruction. Progressive orchardists and communities where the work has been thoroughly carried out have succeeded in holding the disease in check, and in growing profitable crops of pears. This work is also of more or less benefit to apple orchards which are attacked in a similar manner. Excellent progress has been made in educating fruit growers and horticultural inspectors in the proper methods of combating the disease.</p>		
(3) Eradication of "little peach," peach yellows, etc..... \$1,695.42	(3) Eradication of "little peach," peach yellows, etc..... \$1,700.00	(3) Eradication of "little peach," peach yellows, etc..... \$1,200.00
<p>The objects of this work are to demonstrate the value of eradication methods against the "little peach" and peach yellows, and to afford a practical illustration of the importance of eradication in their treatment throughout the country. Investigations of various other diseases of the peach, such as the California blight, or gumming fungus, are also being made.</p> <p><i>Results.</i>—In the Michigan peach belt, where work on the "little peach" disease was conducted for several years, it has been demonstrated that the disease can be controlled by the eradication method, and that it belongs to the same group of diseases as does the disease known as "peach yellows." Where eradication has been properly carried out the orchards have been saved. The work in Michigan has been practically completed, and a similar campaign against these diseases is being conducted in New York with success. Cooperation with the New York State Experiment Station is being carried on in this work.</p> <p>In California the experiments to control the very serious disease there known as the peach blight, or gumming fungus, have shown that the disease can be completely controlled by the use of standard Bordeaux mixture, or lime and sulphur wash applied early in the fall. The methods recommended by the department have been widely used in California, with complete success, and it has been estimated that the treatment has saved many millions of dollars.</p>		
(4) Investigations in general orchard pathology..... 3,491.30	(4) Investigations in general orchard pathology..... 4,050.00	(4) Investigations in general orchard pathology..... 4,550.00
<p>This work includes the study of various diseases of fruits and fruit trees and methods of combating them; the general identification of diseases of fruit and nut trees, including microscopic and laboratory studies as to their cause; a study of the life history of the parasites attacking fruit trees; a study of fungicides for use in treating fruit diseases and of the various methods of preparing and applying them; an investigation of the russetting of fruits caused by fungicides, and of methods of avoiding this trouble; studies in orchard nutrition, particularly of the relation of various artificial and natural fertilizing ingredients to disease resistance; investigations of the pollination of orchard fruits; and studies of the chlorotic diseases of fruits and various other diseases of the fruit and tree, as well as of nut crops, such as the pecan.</p> <p><i>Results.</i>—The investigations of orchard pollination have proved the necessity of planting two or more varieties alternately rather than large blocks of single varieties, in order to insure a full crop of fruit. Two new fungicides, consisting of specially prepared copper sulphide and iron sulphide, have been developed during the past year for the treatment of apple diseases, and these have given excellent results. They are very promising and will be tried on a larger scale another year.</p> <p>The life history of the pecan disease known as scab has been largely worked out in South Carolina and Georgia by experimentation, and a successful method of control has been found by spraying. Many valuable pathological facts relating to the disease have been worked out.</p>		
(5) Peach and plum brown-rot investigations..... 2,950.00	(5) Peach and plum brown-rot investigations..... 3,550.00	(5) Peach and plum brown-rot investigations..... 3,550.00
<p>This work consists of experiments and demonstrations in the control of the brown rot of peaches, plums, and other stone fruits, and also an investigation of peach-foilage injury by spraying with fungicides. The annual loss from the brown rot exceeds two million dollars, and the fruit growers have been helpless to prevent it. The object of this work is to develop a satisfactory treatment for the disease.</p> <p><i>Results.</i>—Excellent results have been obtained in the study of the brown rot of the peach and plum, especially of the life history of the fungus on old peaches and in the soil. It has been shown that stirring the soil prevents the formation of these fruiting bodies.</p> <p>In the investigation of peach-foilage injury by spraying, it has been found that a sulphur wash made by combining lime and sulphur, with no other heat than that produced by the slaking of the lime, gives a preparation</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FRUIT DISEASE INVESTIGATIONS—Continued.	FRUIT DISEASE INVESTIGATIONS—Continued.	FRUIT DISEASE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>which is not injurious to the foliage and which will prevent scab and reduce peach rot to 10 per cent on the sprayed trees, whereas unsprayed trees show about 75 per cent of the disease.</p> <p>Further experiments and demonstrations on the peach in Georgia, Virginia, and West Virginia on a large scale during the season of 1909 showed the commercial success of this treatment. Through cooperation with the Bureau of Entomology, tests were made with the lime-sulphur spray in conjunction with arsenical poisons. The result was a successful combined spray controlling the peach and plum curculio, as well as the fungous diseases of the peach. This accomplishment places commercial spraying of the peach on the same satisfactory basis as that of the apple, a thing hitherto unattained, and the peach growers are promptly taking up the treatment on a large scale.</p>		
(6) Apple spraying demonstrations..... \$6,400.00	(6) Apple spraying demonstrations. \$7,200.00	(6) Apple spraying demonstrations. \$7,200.00
<p>This work is conducted chiefly in Virginia and in the Ozark Mountain region, having for its objects the demonstration of methods of controlling the bitter rot, blotch, leaf-spot, scab, and other diseases of the apple prevalent in those sections, and to bring about the general adoption of these methods by fruit growers. The work has been or is being carried on in a smaller way in Nebraska, Illinois, and other States.</p> <p><i>Results.</i>—In the Ozark Mountain region, where bitter rot has been very prevalent, the orchards treated according to the department's method lost only from 2 to 10 per cent of their fruit, while the untreated orchards lost a very large percentage of their crop. The same is true regarding the fruit blotch, which is the most serious disease of that section. It has been estimated that these demonstrations have saved more than a million dollars to the fruit interests of the Ozarks.</p> <p>These demonstrations have led to the general adoption of proper methods for controlling orchard diseases in many sections. In Virginia a successful method of controlling apple bitter rot has been demonstrated in the Albemarle pippin belt. This work has yielded very satisfactory results, the control of the diseases in the sprayed orchards being practically complete. In all of this work combination treatments have been made to prevent both diseases caused by fungi and injuries produced by insects, in the latter phase of the work in cooperation with the Bureau of Entomology.</p>		
(7) Grape disease investigations..... 5,750.00	(7) Grape disease investigations.... 6,725.00	(7) Grape disease investigations.... 6,725.00
<p>This work is conducted in the grape-growing sections of Pennsylvania, New Jersey, New York, Michigan, and other States, in cooperation with the state experiment stations. Many of the diseases of the grape are in great need of further investigation, and the work consists of the study of the parasites causing the diseases, together with spraying experiments in accordance with the most recent developments of fungicides and machinery, and demonstrations of the practical efficiency of such methods.</p> <p><i>Results.</i>—This work has resulted in demonstrating that the black rot and other fungous diseases of the grape which have threatened to cause the abandonment of vineyards in some sections can be successfully and profitably controlled, even under the most adverse climatic conditions. The past season's work has demonstrated that vineyards practically abandoned on account of loss from black rot can be brought into profitable bearing condition by proper spraying, in connection with pruning and cultivation. The results of spraying experiments in such a vineyard the past season were 90.8 per cent of rot on the unsprayed check plot and only 4.3 per cent rot on the best sprayed plot. A bulletin giving the results of the grape-spraying experiments during the past three years has been published.</p>		
(8) Studies of various small-fruit diseases..... 2,072.37	(8) Studies of various small-fruit diseases..... 2,275.00	(8) Studies of various small-fruit diseases..... 2,275.00
<p>This work includes the diseases of the cranberry and other small fruits; studies of the life history of the anthracnoses and other fungi which infect small fruits and related plants; and various other problems. The objects are to secure a complete knowledge of the fungous parasites and other pathological factors which produce the diseases, especially of their method of growth, reproduction, distribution, and manner of infection, and also the most practical, economical, and effective means of combating them. The work also includes spraying experiments and demonstrations.</p> <p><i>Results.</i>—The work on cranberry diseases, which has been in progress for several years, has resulted in the saving of from 90 to 95 per cent of the fruit by spraying. Bulletins describing the diseases and methods of their control have been issued and placed in the hands of growers, who are successfully using the methods recommended and demonstrated.</p> <p>The complete life cycle of twelve forms of anthracnoses from different plants have been successfully worked out, and much additional knowledge of their relationships and behavior has been obtained.</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
INVESTIGATIONS IN FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 6,046.34 Miscellaneous expenses and supplies..... 2,879.63 Traveling and field expenses..... 2,969.98 Total..... 13,096.00	INVESTIGATIONS IN FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 10,435.00 Miscellaneous expenses and supplies..... 1,630.80 Traveling and field expenses..... 4,474.20 Total..... 17,740.00	INVESTIGATIONS IN FOREST PATHOLOGY. (Haven Metcalf, pathologist in charge.) Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 10,435.00 Miscellaneous expenses and supplies..... 1,600.00 Traveling and field expenses..... 4,475.00 Total..... 17,710.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Investigations of the chestnut bark disease..... 1,365.81 This work has for its object the checking of the advance of this disease, which is now probably the most serious and destructive of any of the diseases affecting forest trees. Methods of quarantining, pruning, and cutting out the trees are being studied, and the use and value of these methods are being demonstrated in infected areas. <i>Results.</i> —It has been shown that where this disease is once established nothing can save the trees, and only general quarantine methods will prevent its continued spread through the forests. Experiments have shown, however, that a pruning and cutting out system perfectly controls the disease under orchard conditions. This fact has been demonstrated in an experimental orchard at Westbury, Long Island, N. Y. The results of this work up to the current season have been published in bulletin form (B. P. I. Bul. 141, Part V, "The Present Status of the Chestnut Bark Disease").	(1) Investigations of the chestnut bark disease..... 2,810.00	(1) Investigations of the chestnut bark disease..... 2,810.00
(2) Study of forest nursery diseases..... 1,948.72 This work includes the damping-off disease of coniferous seedlings and the various diseases affecting forest nursery stock. The object is to devise practical means of controlling and preventing these diseases, and to bring about the adoption of such methods in nursery work. <i>Results.</i> —Various treatments for controlling damping-off diseases have been found to be successful under certain conditions, and unsuccessful under others. Sulphuric acid, soil disinfection, sand or gravel surface, shading, or removal of shade have been tried with varying degrees of success. These results must be systematized before becoming available for general use.	(2) Study of forest nursery diseases..... 2,680.00	(2) Study of forest nursery diseases..... 2,680.00
(3) Investigations of wood staining and decay..... 1,598.97 This work covers the pathological aspects of the rotting of structural timbers, and of the staining of coniferous and other woods used for lumbering purposes. The objects are to devise methods of treatment and to bring about their practical use in the lumber industry. <i>Results.</i> —The technical results of previous work on this project are already being utilized in the standard methods of wood preservation, devised jointly by this bureau and the Forest Service.	(3) Investigations of wood staining and decay..... 2,950.00	(3) Investigations of wood staining and decay..... 3,022.50
(4) Study of miscellaneous forest tree diseases..... 3,702.16 This project includes the various diseases affecting coniferous trees and woods in the national forests and elsewhere; the leaf-dropping disease of white pine; various diseases of deciduous trees; and a survey of the occurrence and spread of tree diseases throughout the United States. <i>Results.</i> —The results to date under this project consist of a vast increase of knowledge as to the nature, occurrence, and seriousness of forest tree diseases, and the way is now open for investigations looking toward their control. The results have been set forth in part in Bulletin 149 of the Bureau of Plant Industry ("Diseases of Deciduous Forest Trees").	(4) Study of miscellaneous forest tree diseases..... 5,023.30	(4) Study of miscellaneous forest tree diseases..... 5,173.30
(5) Study of diseases of shade trees, shrubs, etc..... 682.90 This work is similar to that on miscellaneous forest tree diseases, just described, but is conducted with special reference to the diseases of ornamental and shade trees used in city parks, streets, and similar public places. The objects are to devise means of controlling these diseases and bringing about their practical and economical use. <i>Results.</i> —A great deal of data has been gathered on tree surgery, the proper care of old trees, and the prevention of the commoner diseases. This information is being disseminated through correspondence and otherwise. An article on "Diseases of Ornamental Trees" was contributed to the Yearbook of the department for 1907, embodying the results of these investigations up to that date.	(5) Study of diseases of shade trees, shrubs, etc..... 1,819.20	(5) Study of diseases of shade trees, shrubs, etc..... 1,819.20
(6) Study of diseases due to mistletoe..... 682.90 This work consists of a preliminary survey of the extent and importance of the disease of a number of species of oak, elm, hackberry, cottonwood, and other deciduous trees caused by <i>Phoradendron</i> , with special reference to methods of extermination and of preventing the spread of the trouble. Diseases of coniferous trees due to the same cause are also being investigated. <i>Results.</i> —A bulletin has been sent to press which sets forth the results of this investigation. On ornamental trees mistletoe is shown to be controllable by the proper	(6) Study of diseases due to mistletoe..... 350.00	(6) Study of diseases due to mistletoe..... 350.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
INVESTIGATIONS IN FOREST PATHOLOGY—Continued. PROJECTS—continued.	INVESTIGATIONS IN FOREST PATHOLOGY—Con. PROJECTS—continued.	INVESTIGATIONS IN FOREST PATHOLOGY—Con. PROJECTS—continued.
application of tree surgery. Methods of control under forest conditions, especially in conifers, by modification of the regular system of making cuttings, are being studied.		
(7) Investigations of white pine blight..... \$1,365.82 This project consists of a study of the disease known in the New England States as white pine blight, to ascertain the seriousness of the disease and to advise owners of white pine forests as to its treatment, and as to the advisability of continuing pine reforestation. <i>Results.</i> —It has been shown that the disease is not dangerous, and as a result reforestation with white pine is being confidently continued, and owners are no longer cutting their trees prematurely. The results of this investigation have been published as Circular 35 of this bureau ("The Present Status of the White Pine Blight").	(7) Investigations of white pine blight..... \$502.50	(7) Investigations of white pine blight..... \$100.00
	(8) Investigation of European currant rust on white pine..... 1,605.00 This disease of white pine, caused by the European currant rust (<i>Peridermium strobi</i>), was discovered in New York in June, 1909, and further observations have since demonstrated its presence in the New England States and in Pennsylvania. The disease was introduced in the spring of 1909 from Germany on white pine seedlings. In many parts of Europe it prevents the growing of white pine and its immediate eradication in this country is of the greatest importance. <i>Results.</i> —All cases of this disease have been eradicated, so far as known but the disease must be watched for the next three years. An effort is being made to stop all importation of white pines from Europe in the future, as this is the only way in which repeated introductions of the disease can be prevented. The problem of avoiding further importations of the disease is a serious one when it is considered that no system of inspection will suffice to distinguish healthy from diseased seedlings in certain stages. The results of this investigation have been published as Circular 38 of the Bureau of Plant Industry ("European Currant Rust on the White Pine in America").	(8) Investigation of European currant rust on white pine..... 1,755.00
(8) Study of the crown gall of fruit and forest trees..... 1,748.72 This work, now completed, included chiefly the crown gall diseases of the peach, apple, plum, and grape. These diseases, which consist of both hard and soft galls, as well as the hairy root disease, have caused a great loss to nurserymen and orchardists every year. The crown gall disease of many types of plants have been studied in connection with this work, in cooperation with other offices of the bureau. <i>Results.</i> —It was shown that the apple crown gall can be prevented by careful attention to root grafting, and by wrapping the grafts with cloth, rubber, or paper. A bulletin giving instructions as to the wrapping of grafts has been published and distributed. It was also found that the amount of crown gall increases but little on trees in nursery rows as they grow older. The hairy root, however, apparently increases with age. Similar results of value were obtained on the crown galls of various other plants. The work on this project has now been completed, and further crown gall investigations will be carried on by other offices of the bureau in connection with the investigations of various plant diseases.		
COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY. (W. A. Orton, pathologist in charge.)	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY. (W. A. Orton, pathologist in charge.)	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY. (W. A. Orton, pathologist in charge.)
Salaries, statutory..... \$800.00 Salaries, lump fund..... 7,563.50 Miscellaneous expenses and supplies..... 437.44 Traveling and field expenses..... 2,058.06 Total..... 10,859.00	Salaries, statutory..... \$600.00 Salaries, lump fund..... 7,407.49 Miscellaneous expenses and supplies..... 1,270.91 Traveling and field expenses..... 4,381.60 Total..... 13,720.00	Salaries, statutory..... \$600.00 Salaries, lump fund..... 7,500.00 Miscellaneous expenses and supplies..... 1,160.00 Traveling and field expenses..... 4,300.00 Total..... 13,620.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry.—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Cotton disease investigations..... \$2,237.50 This work includes the study of cotton wilt, anthracnose, blight, rust, shedding, root-rot, etc.; the breeding of varieties of cotton resistant to wilt, root-knot, etc.; and demonstrations of the control of the various diseases affecting cotton. <i>Results.</i> —Resistant varieties of sea-island cotton have been developed as a result of this work. Methods for the improvement of sea-island cotton in Georgia and Florida have been developed, and a farmers' bulletin has been published showing that seed selection, improvement of cultural conditions, and more careful handling of the product will fully remedy existing conditions. It has been shown that the Texas root-rot of cotton can be effectively controlled by deep fall plowing and the rotation of crops. This part of the work has been brought to completion. The wilt-resistant varieties, Dillon and Dixie, bred by the Bureau of Plant Industry, have proved entirely successful, and where our advice concerning rotation of crops is followed complete relief is secured. These varieties and improved cultural methods are now being brought to the attention of the thousands of farmers who need them.	(1) Cotton disease investigations... \$1,850.00	(1) Cotton disease investigations... \$1,800.00
(2) Cowpea disease investigations..... 710.00 This work is a continuation of that begun several years ago in the development of varieties of cowpeas resistant to disease, particularly to wilt and root-knot. The project derives its main importance from the need of such varieties of the cowpea to assist in the control, through rotation of crops, of the root-knot of cotton, the peach, and other crops grown in the South. <i>Results.</i> —A thorough knowledge of the wilt disease of the cowpea has been obtained, and a strain resistant to this disease and to root-knot has been produced. Wilt-resistant varieties have been developed by breeding, notably the hybrids of the Iron cowpea with other varieties. The value of these resistant cowpeas has proved very great on account of the increasing prevalence of root-knot in sandy soil throughout the South, which has made it necessary to abandon all other varieties of cowpeas. Field tests of new hybrids have shown especial promise in two or three of our new productions, which will be increased for further and more extended trials. A recently introduced variety, the Brabham, has also been found to be disease resistant.	(2) Cowpea disease investigations... 500.00	(2) Cowpea disease investigations... 500.00
(3) Potato disease investigations..... 1,475.50 This work is conducted in cooperation with the Vermont Agricultural Experiment Station and consists of laboratory and field researches on the life history of the late-blight fungus and on the underlying reasons for disease resistance shown by certain varieties. <i>Results.</i> —Several facts have been learned that will throw light on the life history of the late-blight fungus. Decided resistance to blight has been found in several varieties. Very valuable data have been secured concerning resistance to early blight, which is a more important disease over the country as a whole during the present season. Successful results from the hybridization of varieties have been obtained. California potato diseases are being studied, and measures for relief have been pointed out to growers in that State.	(3) Potato disease investigations... 2,660.00	(3) Potato disease investigations... 2,660.00
(4) Breeding watermelons for wilt resistance..... 920.00 This work is being conducted in North Carolina and South Carolina, cooperation with the North Carolina Experiment Station being in effect. The objects are to develop and distribute varieties of watermelons which will resist the wilt disease. <i>Results.</i> —This work has resulted in combining the disease-resistant quality of the citron with the watermelon. Selections of resistant strains have continued for several years, and a strain which comes largely true has been secured as a result of our work in South Carolina. A commercial test of this variety has been made, proving it to be of good quality and highly resistant to wilt. It has also very good keeping quality and is a very good shipper when grown in the district where it was bred.	(4) Breeding watermelons for wilt resistance..... 1,000.00	(4) Breeding watermelons for wilt resistance..... 1,000.00
(5) Investigation of malnutrition of truck crops..... 1,935.00 This work consists of a study of the effects of overfertilization of truck crops, particularly of the physiological and pathological effects of the continued excessive application of commercial fertilizers on various vegetables. <i>Results.</i> —This work has been in progress only two seasons, but promises valuable results bearing on the question of fertilization of garden crops. It has been found that the diseases of truck crops induced by improper fertilization can be quickly remedied by rational fertilizing, together with the use of stable manure, lime, and green manures. This problem is of great interest to the entire trucking belt, where large areas of the best trucking soils are becoming less productive each year.	(5) Investigation of malnutrition of truck crops..... 2,600.00	(5) Investigation of malnutrition of truck crops..... 2,550.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.	COTTON AND TRUCK DISEASES AND PLANT DISEASE SURVEY—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(6) Investigations of various truck crop diseases..... \$2,00.00 This work includes experiments and demonstrations in the control of various diseases of peas, beans, cucumbers, cabbage, lettuce, radishes, carrots, tomatoes, and other truck crops. <i>Results.</i> —Demonstrations of the control of diseases of cucumbers, melons, and other crops have been carried out with success. Spraying experiments in the control of the pickle spot of cucumbers in Michigan are being conducted, and a study of the practicability of controlling the pod spots of beans and peas through the use of pure seed is being made. A preliminary study of the decay of cabbage in winter storage has shown that much of the loss can be prevented by improvements in the construction and management of storage houses. Methods of lessening the loss from black rot and wilt are being worked out.	(6) Investigations of various truck crop diseases..... \$3,510.00	(6) Investigations of various truck crop diseases..... \$3,510.00
(7) Plant disease survey..... 1,581.00 This work consists of a comprehensive annual survey of the plant diseases prevalent in the United States. Cooperation with the officers of a number of the state experiment stations is practiced. The object is the collection of information and material regarding the annual prevalence of all plant diseases; to learn the distribution of new diseases; to study epidemics and their relation to weather and other factors; and to map and preserve permanent records of all such diseases. <i>Results.</i> —A great quantity of valuable data regarding the distribution and prevalence of various plant diseases has been secured, and in many cases the factors influencing their spread have been learned. The department is thus kept informed of the need for further investigations along pathological lines. The results of the plant disease survey are published annually in the appendix of the Yearbook of the department. A comprehensive survey of the area surrounding San Antonio, Tex., is being made during the present season.	(7) Plant disease survey..... 1,600.00	(7) Plant disease survey..... 1,600.00
SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS. (Karl F. Kellerman, physiologist in charge.)	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS. (Karl F. Kellerman, physiologist in charge.)	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS. (Karl F. Kellerman, physiologist in charge.)
Salaries, statutory..... \$1,230.00 Salaries, lump fund..... 12,055.00 Miscellaneous expenses and supplies..... 4,151.97 Traveling and field expenses..... 1,479.03 Total..... 18,916.00	Salaries, statutory..... \$1,200.00 Salaries, lump fund..... 11,670.00 Miscellaneous expenses and supplies..... 3,050.00 Traveling and field expenses..... 3,000.00 Total..... 18,920.00	Salaries, statutory..... \$2,520.00 Salaries, lump fund..... 11,950.00 Miscellaneous expenses and supplies..... 1,425.00 Traveling and field expenses..... 3,000.00 Total..... 18,895.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General laboratory and office work..... 6,517.86 This project includes the maintenance of laboratory facilities, the conducting of correspondence, and various other details connected with the investigations in soil bacteriology and water purification. <i>Results.</i> —The results under this project are reflected in the progress noted hereafter under the various field and laboratory projects.	(1) General laboratory and office work..... 6,620.00	(1) General laboratory and office work..... 6,620.00
(2) Soil bacteriology investigations..... 7,238.30 This work includes the isolation and study of the bacteria concerned in nitrification and the investigation of their rôle in plant nutrition; the isolation of various types of soil bacteria and correlation of their economic value; and investigations of the probable correlation of bacteriological activity in the soil with cultural conditions. The work covers the whole question of the relation of bacteria found in soils to fertility and crop production. <i>Results.</i> —The investigations in general soil bacteriology, especially in the Great Plains area, have yielded interesting results. The nitrifying power of western soils seems considerably higher than that of eastern soils, and this seems to be due to two reasons: First, because the nitrifying bacteria themselves are more numerous and more active in western than in eastern soils; and second, because denitrifying bacteria are present in much less degree in western than in eastern soils. The importance of this in crop production is obvious, and as our research work develops further we hope to discover the conditions under which nitrification can be maintained at a maximum during the growing season of crops. In our laboratory experiments it has been found that under control conditions denitrifying bacteria can be made injurious to seedling plants of several kinds. During the next few years investigations will be continued under field conditions to determine how serious and how general an injury to crops may be due to bacterial action. Investigations at Norfolk, Va., during the past year shown a very intimate relationship between the bacteriological conditions and certain of the peculiar physiological troubles of the truck crops of that region.	(2) Soil bacteriology investigations..... 8,875.00	(2) Soil bacteriology investigations..... 8,875.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.	SOIL BACTERIOLOGY AND WATER PURIFICATION INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(3) Experiments with legume bacteria..... \$3,790.18 This work consists of the distribution of pure liquid cultures of nitrogen-fixing bacteria for inoculating leguminous plants; the study of the conditions under which nodule-forming bacteria are unable to form nodules; the breeding and selection of more virile types of nodule-producing organisms; and the study of the life history of the nitrogen-fixing bacteria, especially that of the root nodule of the leguminosæ. <i>Results.</i> —The distribution of pure cultures of the nodule-forming organism for legumes has been continued with a good degree of success. Experiments have been carried on with types of soil which because of peculiar conditions prevented the growth of the proper legume bacteria and consequently made it impossible to grow leguminous crops. By the preparation of extracts of soil and gradually adapting the nodule-forming organisms to the peculiar conditions, it has been possible to inoculate the legume satisfactorily in regions heretofore inimical to pure culture inoculation. Some of these conditions are described in Bulletin 100, Part 8, of the Bureau of Plant Industry, and later results of the work are now in course of publication. Investigations of the value of inoculated legumes as green manure for tobacco have shown that by turning under a crop of inoculated vetch it is possible to reduce the quantity of nitrogenous fertilizers by about one-half. The results of these investigations have been published.	(3) Experiments with legume bacteria..... \$3,000.00	(3) Experiments with legume bacteria..... \$3,000.00
(4) Water purification investigations..... 1,369.66 This work includes demonstrations of the copper treatment to eradicate algæ from farm water supplies, and is the result of preliminary experiments on ice ponds, pleasure lakes, etc., to determine the value of copper as a disinfectant and of the copper and chlorine treatment of sewage effluents immediately before their discharge into streams as a means of preventing dangerous bacterial contaminations. <i>Results.</i> —The investigations in water purification are now confined entirely to farm water supplies. From the results secured in preliminary studies it has been possible to furnish much advice as to the improvement of farm sanitation. It has been found that there is unfortunately a need for improvement in the average farm condition, and it will be impossible to depend upon a chemical treatment for these bacterial pollutions. An exhaustive sanitary reconnaissance of the farm water supplies of the State of Minnesota has shown that the farm water supplies generally are in rather bad condition, and that in most cases they can be rendered safe by simple and inexpensive changes, such as installing tight casings and coverings and protection against surface drainage. The results of previous investigations upon the disinfection of sewage, reported in Bulletin 115 of the Bureau of Plant Industry, have been put to practical use by the state board of health of Ohio.	(4) Water purification investigations..... 425.00	(4) Water purification investigations..... 400.00
CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS. Formerly "Plant Life History Investigations."	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS.	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS.
(Walter T. Swingle, physiologist in charge.)	(Walter T. Swingle, physiologist in charge.)	(Walter T. Swingle, physiologist in charge.)
Salaries, statutory..... \$2,339.16 Salaries, lump fund..... 17,785.69 Miscellaneous expenses and supplies..... 430.20 Traveling and field expenses..... 5,449.20 Total..... 26,004.25	Salaries, statutory..... \$5,020.00 Salaries, lump fund..... 20,002.00 Miscellaneous expenses and supplies..... 2,538.00 Traveling and field expenses..... 3,150.00 Total..... 30,710.00	Salaries, statutory..... \$5,620.00 Salaries, lump fund..... 18,892.00 Miscellaneous expenses and supplies..... 2,973.00 Traveling and field expenses..... 3,150.00 Total..... 30,635.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work..... 5,811.48 This project includes the planning and direction of the field investigations, the conduct of correspondence and keeping of records, and other details connected with the field work. <i>Results.</i> —The results under this project are reflected in the progress noted under all the other projects, described in the following paragraphs:	(1) General supervisory and office work..... 7,643.33	(1) General supervisory and office work..... 7,060.00
(2) Date investigations..... 2,964.55 The objects of this work are to bring about the establishment of date culture on a commercial scale in the United States, and particularly to investigate the life history of the date palm with reference to the different varieties and the methods of culture best adapted to American conditions. <i>Results.</i> —The date palms in the experimental garden at Mecca, Cal., which are now 3 years old, are fruiting freely, and the famous Deglet Noor, and a number of other fine varieties, have ripened at this and at the other gardens in the Southwest. There is now positive proof	(2) Date investigations..... 2,966.66	(2) Date investigations..... 4,075.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
that first-class table dates, far superior to any now imported from abroad, can be produced in California. The four other cooperative date gardens—in California, Arizona, and Texas—are making excellent showings, and a number of fine dates have ripened at these gardens. Particular interest has been aroused by the "dry dates," which have been liked by all who have tested them. This is a type of date unknown to American and European consumers. They are dry and hard, and can easily be kept for several years if protected from weevils. In cooperation with private individuals, thousands of date seedlings are being propagated in the Southwest; and much interest has been taken by growers in the planting of seedling date orchards in the hope of securing new varieties better adapted to American climatic conditions. In this way the foundation is being laid for the breeding of distinctly American varieties of dates far superior to any now grown in the oases of the Old World. Already the date gardens of this country show a finer assortment of choice date varieties than can be found in any one date region of the Old World.		
(3) Fig investigations..... \$1,857.65 The objects of this work are to investigate the process of caprification of the fig and to study in detail the life history of the figs used for drying purposes, and also of the caprifigs in which the insect is produced. <i>Results.</i> —It has been possible as a result of this work to advise settlers in new regions and to prevent losses which would inevitably occur from planting fig orchards in sections where they could not succeed, and, on the other hand, to encourage growers in regions where the culture of figs is likely to prove profitable. The seedling fig orchard at Loomis, Cal., set out in 1886 by a private grower, has been leased by the Department of Agriculture, and cuttings from the choice figs and caprifigs originated there have been distributed to fig growers throughout the country on condition that the recipient plant out a designated number of seedling figs to be furnished by the department. The results obtained at Loomis show that a fair proportion of these seedlings will produce edible varieties, some of them even superior to the best imported sorts, with the added advantage of being originated on the particular farm where they are to be grown. It is believed that, as a result of these experiments, thousands of new varieties particularly adapted to American conditions will be originated, so that it is very probable that American varieties of figs will ultimately lead the world both in quality and productiveness.	(3) Fig investigations..... \$2,886.66	(3) Fig investigations..... \$3,800.00
(4) Breeding of new and improved citrus fruits..... 2,573.66 This work is a continuation of that inaugurated a number of years ago in the development by hybridization of hardy frost-proof oranges, new and improved types of citrus fruits, and improved pineapple varieties. It has been the aim to secure hardy oranges which may be grown in more northern regions than the present orange belt and which will be able to resist severe freezes; to obtain hybrids combining the loose skin of the tangerine with the quality and form of the ordinary orange; and to secure improved varieties of tangerines, oranges, pomelos, and other citrus fruits. <i>Results.</i> —A new group of hardy citrus fruits, or "citranges," has been developed and distributed for trial. These have proved to be very useful substitutes for lemons and can be grown as home fruits throughout the South, the warmer parts of Idaho and Nevada, and even in Oregon and Washington. Another new group of citrus fruits, the "tangelo," has been produced, as well as two new tangerines and two new limes. Five new pineapples of superior quality have also been secured, and the work with this fruit has been completed. During the last two seasons a large number of crosses have been made between the orange and citranges. The seedlings from these crosses show a wide range of leaf character, some of them closely resembling the orange, though undoubtedly having one-quarter <i>Citrus trifoliata</i> blood. There is every reason to expect that some of these "three-quarter" hybrids will yield fruits sufficiently sweet to be available for table use and at the same time have something of the hardiness of the trifoliata orange.	(4) Breeding of new and improved citrus fruits..... 2,733.34	(4) Breeding of new and improved citrus fruits..... 4,400.00
(5) Arboricultural investigations..... 3,582.47 This work has for its objects the bringing about of the utilization of tree crops in dry-land regions, and to study the life history of fruit, nut, and forage trees likely to succeed in the drier parts of the Southwest. Among the crops now under trial are the pistache, almond, apricot, fig, and olive. <i>Results.</i> —A comparatively little known group of fruit trees, the nearest American relatives of the peach, almond, and apricot, have been under investigation. Four of these, occurring in dry situations, are of much promise as stocks for the cultivated species. At least one of them has been used successfully as a stock upon which to graft the ordinary almond in dry situations.	(5) Arboricultural investigations..... 4,483.32	(5) Arboricultural investigations..... 4,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.	CROP PHYSIOLOGY AND BREEDING INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>In cooperation with another office of the bureau, work is now under way in the testing of the most drought-resistant varieties of the olive at various points in the Southwest. A bulletin on Dry Land Olive Culture in that region has been prepared, confirming in a most striking manner reports of the drought-resistant powers of the olive.</p> <p>(6) Demonstration farms on Indian reservations..... \$2,888.36</p> <p>This work is conducted in cooperation with the Indian Service, having for its objects the testing of crops promising for culture on the Indian reservations in the Southwest, with a view to finding profitable crops for the Indians to grow for themselves and to familiarize them with the handling of crops likely to be grown by the white settlers nearby by utilizing Indian labor.</p> <p><i>Results.</i>—Cooperative testing and demonstration gardens have been established on the Indian reservations at Sacaton, Ariz.; Shiprock, N. Mex.; and Pyramid Lake, Nev. The Bureau of Plant Industry furnishes the seeds, plants, etc., and directs the experiments, the Office of Indian Affairs furnishing land, irrigation water, and labor. Egyptian cotton, Bermuda onions, citranges, dates, pistaches, pecans, drought-resistant tree crops, alfalfa, grapes, figs, etc., are being tested.</p> <p>Much importance is being given to the establishment of Egyptian cotton culture, in cooperation with other offices of the bureau. A 20-acre field is growing at the garden at Sacaton, Ariz., and the Indians are being trained in the handling of this crop. Ultimately the Indians will probably grow cotton themselves, to be picked by the women and children, while the men hire out to the white settlers.</p> <p>(7) Miscellaneous laboratory and field work..... 1,428.53</p> <p>This miscellaneous project includes an investigation of the application of electricity in plant culture, to determine by field tests whether electricity can be applied to advantage in truck farming; an investigation of the stimulation treatment of crops, to discover the causes of increased yields of plants sprayed with Bordeaux mixture and of cereals treated to prevent smut; the improvement of high-power microscopes for use in laboratory investigations; a study of the life history of the pistache nut and its wild relatives, with a view to its commercial culture; and similar work on the truffle fungus and truffle oaks, with the object of developing a new industry in truffle culture in the United States.</p> <p><i>Results.</i>—In cooperation with the Physical Laboratory, investigations have been made which enable the department to advise correspondents as to the real status of "electro-culture" and to prevent the exploitation of fraudulent schemes and claims with regard to the use of electricity in farming.</p> <p>In the work on the pistache a number of scions of the best commercial varieties of flavoring pistaches have been secured from Sicily and Asia Minor, and these are under experimentation in the Southwest. It is believed that the pistache will prove valuable on unirrigated lands where other fruit and nut crops will not succeed. Many thousands of stocks have been distributed, and a large supply of seed of the Chinese pistache, known for years as the hardiest wild pistache available, has been secured as a stock upon which to graft the cultivated pistaches.</p> <p>(8) Clover and alfalfa investigations..... 4,897.55</p> <p>The objects of this work are to investigate the life history of clover and alfalfa with special reference to climatic, soil, and cultural requirements of the various varieties, and at the same time to determine whether change of seed is beneficial and practical.</p> <p><i>Results.</i>—A new long-season alfalfa for the Southwest has been discovered which will grow at lower temperatures than any other known alfalfa. This form passes without injury through frosts which kill all ordinary alfalfas.</p> <p>A new type of red clover has also been found which is superior to the ordinary varieties in cultivation. Each of these new varieties has been described in a publication, and their trial can be recommended with reasonable certainty of success.</p>	<p>(6) Demonstration farms on Indian reservations..... \$3,155.22</p> <p>(7) Miscellaneous laboratory and field work..... 1,707.13</p> <p>(8) Clover and alfalfa investigations..... 5,134.34</p> <p>NOTE.—After the present fiscal year the investigations on clover and alfalfa will no longer be carried on as a separate project. Such work on alfalfa culture as may be necessary will be conducted mainly in connection with the date gardens in the Southwest and the field stations on the Indian reservations.</p>	<p>(6) Demonstration farms on Indian reservations..... \$4,800.00</p> <p>(7) Miscellaneous laboratory and field work..... 2,000.00</p> <p>(8) Discontinued. See note in 1910 column.</p>
ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS. Formerly (a) Bionomic Investigations and (b) Cotton-Breeding Investigations.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS.
(O. F. Cook, bionomist in charge.)	(O. F. Cook, bionomist in charge.)	(O. F. Cook, bionomist in charge.)
Salaries, statutory..... \$3,216.69	Salaries, statutory..... \$3,800.00	Salaries, statutory..... \$3,800.00
Salaries, lump-fund..... 23,075.50	Salaries, lump-fund..... 19,466.00	Salaries, lump-fund..... 21,300.00
Miscellaneous expenses and supplies..... 3,748.88	Miscellaneous expenses and supplies..... 7,434.00	Miscellaneous expenses and supplies..... 5,500.00
Traveling and field expenses..... 7,735.04	Traveling and field expenses..... 7,820.00	Traveling and field expenses..... 7,870.00
Total..... 37,776.11	Total..... 38,520.00	Total..... 38,470.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) Office and laboratory work..... \$5,776.92 This project includes the correspondence and administrative routine, the preparation of publications, laboratory experiments, and other general details connected with the special lines of investigation. <i>Results.</i> —The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs:	(1) Office and laboratory work..... \$6,076.04	(1) Office and laboratory work..... \$4,816.04
(2) Acclimatization and adaptation of weevil-resistant and drought-resistant types of cotton..... 13,317.49 This work includes the study of weevil-resisting adaptations of native varieties of cotton in weevil-infested regions of tropical America and the acclimatization of the more promising sorts in the United States; also the working out of modifications of cultural methods necessitated by the presence of the boll weevil, special characters and methods of culture which favor drought resistance and enable cotton culture to be extended into dry regions where the boll weevil can do little damage, and of factors of local adjustment in cotton varieties to counteract weevil injuries by increased efficiency of production. <i>Results.</i> —Weevil-resisting varieties of cotton have been found in Mexico and Central America that have enabled regular cotton culture to be carried on in the presence of the boll weevil. These varieties are closely related to the Upland cottons of the United States and have the same cultural characteristics and commercial value. They behave in a very abnormal manner when first planted in the United States, but in all the imported types that belong to the Upland series definite progress is being made toward acclimatization. Some of these are showing distinct advantages over the present Upland cottons, not only on the side of weevil resistance, but in having larger bolls and longer lint than any of the Upland cottons now grown in the United States, combined with other desirable qualities such as extreme earliness and tolerance of drought. Experiments in Texas, Kansas, Arizona, and California indicate that cotton of excellent quality can be produced in many regions where none has been grown in the past, and that cotton yields a marketable product with less water than any other crop now grown in the Southwest. Some of the Central American varieties have shown much larger growth under conditions of drought in southwestern Texas than any of our United States varieties, the structure of the leaves being better adapted to restrict the transpiration of water. Greater drought resistance will enable cotton cultivation to be carried on more successfully in the dry Southwest where the boll weevil is much less injurious than in the humid regions farther east.	(2) Acclimatization and adaptation of weevil-resistant and drought-resistant types of cotton..... 10,350.00	(2) Acclimatization and adaptation of weevil-resistant and drought-resistant types of cotton..... 10,350.00
(3) Study of general problems of cotton breeding..... 5,908.18 This work includes investigations of the general factors of improvement and deterioration of cotton varieties; the effects of different methods of selection upon uniformity and productiveness; the relation of external conditions and methods of culture to breeding problems; the effects of cross-pollination and the advantages of isolating pure strains; the breeding value of mutations and hybrids; the agricultural value of special cultural characteristics, earliness, clustering, and other habits of growth, as well as storm-proof characters; and methods of testing varieties for the adequate determination of yield and other cultural qualities. <i>Results.</i> —It has been found that uniformity can be maintained by simple mass selection of superior plants that conform to the standards of a variety, but the further advantage of more complete isolation of individual lines of descent is to be considered, as well as whether this method is advisable for farmers in upland districts. An unexpectedly large amount of cross-pollination has been found to take place in cotton, through the agency of bees and other insects. There are also indications that cross-pollination is responsible for a large amount of diversity and deterioration of varieties. This requires the modification of methods of breeding and more complete separation of breeding experiments from the testing of varieties, and affords another reason why each cotton-growing community should limit itself to a single, adequately tested, locally adjusted variety. Greater uniformity and stability have been found in strains of cotton derived from individual mutations, as compared with hybrid stocks. The rapid degeneration of later generations of hybrid stocks indicates that this popular method of improving plants may not be applicable to cotton. Intimate relations have been traced between length, strength, and uniformity of lint and conditions of soil that determine the water supply of plants, showing that soil conditions must be taken into account in the breeding of long-staple cottons.	(3) Study of general problems of cotton breeding..... 6,194.00	(3) Study of general problems of cotton breeding..... 6,194.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>(4) Local adjustment and breeding of upland cotton..... \$7,122.93</p> <p>This work has for its object the application of methods of local adjustment and breeding in the development of superior types of cotton in different parts of the cotton belt. The principal experiments are located in Texas, Louisiana, Arkansas, Tennessee, and South Carolina. The work includes the improvement of local varieties by selection, the discovery of desirable new variations, and the introduction, local adjustment, and testing of varieties from other localities, to determine their adaptation to special conditions and methods of culture.</p> <p><i>Results.</i>—A considerable number of improved varieties and strains of Upland cotton have been developed and distributed to farmers in different parts of the cotton belt. Many other promising types are being selected and tested. Improved types of Upland long-staple cottons have been developed, notably the Columbia cotton of South Carolina, originated from a single variation. Other long-staple varieties have been bred for northeastern Texas and Louisiana, which are earlier than older long-staple sorts that are being driven out of cultivation by the boll weevil.</p> <p>An early variety called Trice has been developed for western Tennessee, Missouri, and adjacent regions, and has shown itself distinctly better than the early King cotton which was used in Texas as a means of reducing the injuries of the boll weevil.</p> <p>The possibilities of further improvement of the Texas Big-boll type of cotton are receiving careful consideration, and several promising new types are being selected and tested. Two of these have given many definite evidences of superiority over the popular Triumph cotton, and are now being tested in regular field plantings. The general superiority of the Texas Big-boll cotton over the other short-staple Upland varieties is being shown in Texas, even under conditions of weevil infestation, and investigations of the value of such varieties for Arkansas, Tennessee, South Carolina, and other parts of the cotton belt have been begun. The large bolls and the storm-proof characters reduce the labor of picking and the injurious effects of bad weather, so that these big-bolled varieties are likely to become popular in all Upland-cotton districts if they can be adjusted to the different conditions.</p>	<p>(4) Local adjustment and breeding of Upland cotton \$9,395.80</p>	<p>(4) Local adjustment and breeding of Upland cotton \$10,603.80</p>
<p>(5) Corn extension investigations..... 4,296.43</p> <p>This work includes the study of the adaptive characters of the varieties of corn indigenous in Mexico, Central America, and South America, and of the effects of new and changed conditions on the varieties. The objects are to acclimatize the promising varieties in the different regions of the United States where their natural characteristics fit them for the local conditions, and to learn the effects of change of seed; also to secure varieties adapted to our tropical territory and to the subtropical Gulf regions and the semiarid West, where corn is not now grown or is a precarious crop.</p> <p><i>Results.</i>—Many varieties of corn have been found in Central and South America and in Asia with pronounced adaptations to conditions outside of the present range of culture in the United States, and furnish valuable material for breeding. Of special interest is a variety from Shanghai, China, which has the silks of the young ear protected by the base of the leaf. The leaf sheath and blade are held in a nearly vertical position and serve as a sheltered receptacle for pollen, into which the silks are pushed and become fertilized without being exposed to the drying of the wind, which in ordinary varieties often results in the drying of the silks before fertilization can take place.</p> <p>Experiments have shown that the yield from crosses of two varieties or strains of corn is in almost every case materially larger than that of the parents. It has been pointed out in a publication that this method of increasing the yield can be utilized in farm practice. Experiments are now being conducted with a view to a more thorough understanding and demonstration of the importance of this factor in different varieties of corn.</p>	<p>(5) Corn extension investigations... 5,150.00</p>	<p>(5) Corn extension investigations... 5,150.00</p>
<p>(6) Bionomic studies of various tropical plants..... 1,354.16</p> <p>In connection with the investigations of tropical varieties of cotton and corn several other tropical plants are being studied, in order to ascertain the value of existing varieties and to learn methods of acclimatization and adaptation to conditions found in the United States or our insular possessions; also to study the relations between breeding and acclimatization, and the effects of different methods of breeding upon the agricultural value of varieties. These studies include such crops as coffee, cacao, rubber, the avocado and other tropical fruits, vegetables, and also the economic palms.</p> <p><i>Results.</i>—The studies of coffee, cacao, and rubber have shown the way to improved methods of culture, pruning, and breeding, based on more detailed knowledge of varietal differences, methods of branching, and reactions to external conditions. The feasibility of much larger</p>	<p>(6) Bionomic studies of various tropical plants..... 1,354.16</p>	<p>(6) Bionomic studies of various tropical plants..... 1,354.16</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.	ACCLIMATIZATION AND ADAPTATION OF CROP PLANTS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
production of coffee in Porto Rico has been ascertained. The determination of the status of rubber culture in Mexico and Central America has enabled the department to give warning to investors and to save to the American public very large amounts of money that would otherwise have been lost. Superior varieties of cacao, the avocado, chayote, and other tropical crop plants have been discovered in Central America which are suitable for introduction into the United States and the insular possessions. New species of economic palms have been discovered in Central America, some worthy of cultivation for food and other practical purposes and others suited for household cultivation as ornamentals and capable of being bred in the United States and Porto Rico instead of being imported from the East Indies. The acclimatization experiments have thrown new light upon several important problems of breeding. A general outline of the physiological effects of different methods of breeding upon the vigor and fertility of plants has been completed and the results published in a bulletin.		
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS.
(Rodney H. True, physiologist in charge.)	(Rodney H. True, physiologist in charge.)	(Rodney H. True, physiologist in charge.)
Salaries, statutory..... \$4,442.33	Salaries, statutory..... \$5,480.00	Salaries, statutory..... \$5,960.00
Salaries, lump fund..... 23,012.97	Salaries, lump fund..... 32,572.00	Salaries, lump fund..... 32,572.00
Miscellaneous expenses and supplies..... 13,907.24	Miscellaneous expenses and supplies..... 4,438.00	Miscellaneous expenses and supplies..... 3,908.00
Traveling and field expenses..... 6,419.66	Traveling and field expenses..... 7,850.00	Traveling and field expenses..... 7,850.00
Total..... 47,782.20	Total..... 50,340.00	Total..... 50,290.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative and supervisory work..... 9,821.70	(1) Administrative and supervisory work..... 8,743.04	(1) Administrative and supervisory work..... 8,743.04
This project includes the planning and general supervision of all of the work on drug, poisonous, and other plants, etc.; the general office and laboratory work connected with the field investigations; and other supervisory or routine features of the work.		
<i>Results.</i> —The results under this project are reflected in the progress and results noted under all of the other projects, described in the following paragraphs.		
<i>Drug and related crops.</i>	<i>Drug and related crops.</i>	<i>Drug and related crops.</i>
(2) Establishment of the camphor industry..... 2,648.27	(2) Establishment of the camphor industry..... 2,330.00	(2) Establishment of the camphor industry..... 2,330.00
This work consists of field tests of the grown camphor tree with reference to camphor distribution, propagation, and cultivation, and the working out of the best methods of growing camphor trees and of utilizing the product. Tests have shown that camphor obtained from American trees is identical with that imported from the Orient. It is believed that camphor trees will flourish over a large part of the area from which frost has driven the orange, and that they will produce camphor in commercial quantities.		
<i>Results.</i> —The commercial planting of camphor in Florida continues to progress. It is believed that the camphor industry has now been established on a firm basis. A large acreage has been planted to camphor in Florida, and interest in the growing of this crop is being shown elsewhere. From 3,000 to 4,000 acres of the trees are being prepared for planting in Florida alone. The preliminary work has consisted largely in starting young stock from parent trees carefully selected for camphor content. To obtain this result, samples of material were carefully distilled from well-shaped, healthy seed-bearing trees having a good rate of growth. Where the gum content was found to be high, seeds of these trees were obtained for planting.		
During the past year an experimental factory has been partially equipped. New types of apparatus are being worked out and tested on material from trees now growing in Florida.		
(3) Compilation of information on drug plants..... 1,852.50	(3) Compilation of information on drug plants..... 1,850.00	(3) Compilation of information on drug plants..... 1,850.00
This work consists in the collection of data concerning drug plants, which are the subject of frequent inquiries, and the preparation of publications for use in answering requests and in disseminating useful information regarding drug plants.		
<i>Results.</i> —A number of publications which have found a wide field of usefulness have resulted from this work. These publications are meeting a great and continued demand for information regarding the native drug plants. A series of publications describing and illustrating the most used crude drugs and the plants producing them has been partially completed. Two numbers, dealing with roots and barks, have appeared, and further numbers, dealing with herbs, leaves, flowers, and fruits, are in course of preparation.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Continued.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Drug and related crops—Continued.	Drug and related crops—Continued.	Drug and related crops—Continued.
(4) Arlington, Va., drug-plant testing garden..... \$3,563.20 The objects of the work at this garden are to ascertain the best methods of handling foreign and domestic drug plants, both wild and cultivated, and to make careful observations on methods of propagation, culture, curing, etc. Tests to show whether the amount of active principle present in the plants can be increased by fertilization are under way. In order to permit the necessary extraction and distillation of the products grown experimentally, a small field laboratory is maintained in connection with the drug garden. <i>Results.</i> —It has been shown that many valuable drug crops can be produced in this country. The United States sends abroad each year from ten to fifteen million dollars for the purchase of plant drugs, many of which can be grown at home. Methods of cultivating and growing many important drugs now imported have been worked out, and important native drug-producing plants threatened with extermination have been brought under cultivation; for example, golden seal, cascara, ginseng, etc. Publications on the cultivation of golden seal, ginseng, and peppermint have been issued, and reports on growing cascara sagrada and <i>Cannabis indica</i> have been prepared for publication. A marked interest in drug-plant growing is developing among the large crude-drug dealers.	(4) Arlington, Va., drug-plant testing garden..... \$3,140.00	(4) Arlington, Va., drug-plant testing garden..... \$3,140.00
(5) South Carolina drug-plant testing gardens..... 2,262.56 These gardens are located at Ebenezer and Florence. Their work is similar to that at Arlington, Va., just described, with the added feature of demonstrations of the culture of the most promising drug crops. The object is to encourage the production of drug plants on a commercial scale in South Carolina. <i>Results.</i> —The growing on a commercial scale of several drug plants has been accomplished, and several tons of important sorts have been sold, demonstrating the commercial possibilities of South Carolina in drug production. During the past season about 45,000 pounds of dried paprika pods have been grown and marketed to spice dealers at a profit comparing very favorably with that given by standard crops. The establishment of a small industry in pepper production seems to be assured. Plans looking toward the growing of cayenne types are being put into execution.	(5) South Carolina drug-plant testing gardens..... 2,225.00	(5) South Carolina drug-plant testing gardens..... 2,225.00
(6) Physiological testing of plant drugs..... 411.19 This work consists of laboratory tests of American-grown drug plant products, to determine the amount of active principle present therein. The object is to ascertain by animal tests the value of American-grown digitalis, <i>Cannabis indica</i> , etc. Known doses are administered to animals to ascertain by the action on them the amount of active principle present. <i>Results.</i> —By this means it has been shown that American-grown Cannabis from Washington or Texas is as effective as the India-grown drug. Similar tests of other drug plants have been made, and the work is largely incidental to the other projects.	(6) Physiological testing of plant drugs..... 537.50	(6) Physiological testing of plant drugs..... 487.50
(7) Volatile oil and perfumery plant investigations..... 1,178.85 This work consists of a study of American-grown plants yielding volatile oils, with reference to their utilization in the manufacture of perfumery, soaps, etc. These materials are now in large part imported. Both wild and cultivated plants are under test, and laboratory distillations to isolate the fragrant principles are made. <i>Results.</i> —In this work, which was only undertaken on a small scale in 1908, some fine products have already been produced which should find a ready market demand if produced commercially, such as the oil of <i>Mentha citrata</i> , <i>Monarda fistulosa</i> , and <i>M. punctata</i> . Valuable substances, commanding high prices in the market, have been found in oils distilled from the fireweed, white sage, and black sage—all common weeds. A physiological study of the conditions governing oil formation has been begun. Cultural tests of foreign perfumery plants are under way at the various drug-plant testing gardens. In connection with the camphor work in Florida, a large number of plants yielding valuable perfumery products have been secured and partially tested, as, for instance, lemon grass, vetiver, etc. The prospect seems excellent for developing crops likely to be of great value to Florida.	(7) Volatile-oil and perfumery plant investigations..... 1,750.00	(7) Volatile-oil and perfumery plant investigations..... 1,750.00
(8) American hop investigations..... 3,979.89 This work is a study of the relation between the quality of hops and methods of growing, curing, and handling the product, and the working out of the conditions most favorable to the development of desirable qualities and constituents. The object is to ascertain to what extent the good and bad qualities of American hops are due to methods of growing, curing, etc. <i>Results.</i> —A study of hop drying has been continued in California and the effect on the principal constituents re-	(8) American hop investigations.... 2,910.00	(8) American hop investigations.... 2,910.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p>DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p><i>Drug and related crops—Continued.</i></p> <p>sulting from the different methods employed has been under investigation. As a special problem, the source of small amounts of arsenic occasionally found in both foreign and domestic hops was sought. It was made clear that in the case of our domestic hops little arsenic is absorbed by the plant, even though the soil is watered frequently with arsenic solutions of considerable concentration. The source was found in the impure sulphurs used in sulphuring the hops. This conclusion is one of great importance to the hop industry and seems to make the cure of this long-standing trouble easily possible. It may also have a very important bearing on the sulphuring of fruits and other products used in foods or drinks. A careful study of the field conditions governing the quality and yield of hops is in progress, and the relation of hop constituents to quality of product is receiving attention.</p> <p>(9) Production of alkaloids from poppy capsules..... \$1,005.38</p> <p>The objects of this work were to test the practicability of utilizing the walls of the capsules of the Asiatic poppy as a commercial source of morphine, codeine, and other alkaloids, and the working out of methods of propagation, cultivation, and handling in relation to the extraction of alkaloids from the plants.</p> <p><i>Results.</i>—It was found practicable to isolate opium alkaloids from the capsule waste of the poppy plant remaining after the seeds have been removed. Success was obtained in an experimental planting of poppies in the State of Washington. A yield of about 900 pounds per acre of very good seed and about 700 pounds of capsule walls was obtained. The seed was sold in open market at top prices, showing an average income per acre for the seed alone of \$55.36. The seeds of the poppy constitute the "Mohn" seed of German-speaking countries and are highly valued by bakers. The annual consumption in Chicago alone is 500,000 pounds.</p> <p>The capsule walls remaining after the separation of the seed mentioned above were used for the extraction of alkaloids, which was carried out during the past year. The work on this project has now been completed.</p>	<p>DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.</p> <p>PROJECTS—continued.</p> <p><i>Drug and related crops—Continued.</i></p> <p>(9) Tanning and dye-plant investigations..... \$1,220.00</p> <p>This work consists of experiments with promising tannin crops, with a view to their cultivation as farm products. With the passing of the forests the tanning industry has found increasing difficulty in obtaining a satisfactory supply of tanning materials, and this has resulted in an increasing importation of extracts, barks, etc. The production of these materials at home is worthy of encouragement. This project also includes plants used in the manufacture of dyes.</p> <p><i>Results.</i>—A preliminary study has shown that there are unused sources of tannin existing in neglected products. The tanning qualities of these substances are being studied in cooperation with practical tanners. Plans are being made for the experimental cultivation of tannin-yielding crops.</p> <p>(10) Lemon investigations..... 2,608.33</p> <p>This work includes a study of the conditions under which lemons are grown and prepared for market, with special reference to methods of curing, in order to ascertain the cause of the poor keeping quality of the American product and to remove it if possible; the working out of methods of utilizing lemon waste products, such as the formation of citric acid from distilled fruits; and incidental work in the improvement of lemons by selection, to ascertain whether the yield and keeping qualities of lemons may be improved in this manner.</p> <p><i>Results.</i>—Fruit handled in various ways has been shipped from California to Washington, D. C., and held for keeping tests. Tree-ripened, tent-cured, and sweated fruit have had careful laboratory study, and important facts have been learned therefrom. It seems probable that the cause of the deficient keeping quality of the American fruit is due in part to poor methods of handling, but to a great degree to the destructive action of fungi, which attack the fruit. A bulletin on this and other points bearing on the methods of lemon sweating and curing has been published. A further study of the sweating process seems to show that gaseous products of imperfect combustion exercise an important influence in coloring the fruit.</p>	<p>DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.</p> <p>PROJECTS—continued.</p> <p><i>Drug and related crops—Continued.</i></p> <p>(9) Tanning and dye plant investigations..... \$1,220.00</p> <p>(10) Lemon investigations..... 2,608.33</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Continued.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Drug and related crops—Continued.	Drug and related crops—Continued.	Drug and related crops—Continued.
(11) Tea investigations..... \$3,221.49	(11) Tea investigations..... \$2,253.00	(11) Tea investigations..... \$2,253.00
<p>This work includes experiments in the growing and manufacture of tea on a commercial scale, chiefly in South Carolina; the devising of practical machinery for pruning and picking to reduce the cost of production, and the testing of improved methods of producing tea in the United States; also the improvement of the yield and quality of the tea leaf by selection, and various physiological studies of the changes due to fermentation, the relation of constituents to fragrance and aromatic properties, and of the material at various stages of manufacture.</p> <p><i>Results.</i>—The tea situation in South Carolina continues to be very promising. The production of tea has been satisfactory, and an increased demand for American tea absorbs the product. The cost of production is being reduced and the quality of the product is steadily improving without any diminution in the yield.</p> <p>A machine has been devised for pruning tea, which promises, when minor defects are corrected, to reduce the cost of pruning tea—now a hand process—to about one-fifth of the present cost. A tea-picking machine has also been planned, and while not yet in operation, gives promise of solving another important problem connected with the tea industry of the United States.</p> <p>It has been demonstrated that tea will grow well in the proper situations in this country and will produce an abundant yield, and that this yield of leaf can be made into excellent tea. The agricultural and manufacturing aspects of the tea industry have been in a very great measure worked out. The problem of marketing is at present the chief unsettled point. It is believed that through the use of labor-saving machinery much can be done toward the development of an American tea industry.</p> <p>Considerable progress has been made in the experimental work in tea improvement. It has been shown that by a careful selection of stock for planting the yielding capacity of a tea field can be much increased. In the laboratory it has been shown that tea fermentation is due to the action of oxidizing enzymes or other constituents of the leaf, and that the tea aroma is not due to volatile oils, as was generally supposed, but to substances generated in the tea during factory processes.</p> <p>As the tea work advances, the funds necessary for its support diminish, as indicated by a comparison of the figures given above.</p>		
(12) Study of farm production of industrial alcohol..... 2,315.44	(12) Study of farm production of industrial alcohol..... 648.00	(12) Study of farm production of industrial alcohol..... 648.00
<p>This work included a study of this problem in European countries, now completed; and also includes field tests of the fermentation and distillation of potatoes, corn, sorghum, ensilage, sugar beet pulp, and other cheap crude sources of fermentable plant material; tests of the most suitable types of apparatus for carrying on these processes; and the devising of apparatus for utilizing industrial alcohol on the farm. The entire work deals with the situation from the standpoint of plant industry, and has for its objects the investigation of the possibilities in the production of industrial alcohol on the farm, and the determination of the alcohol value of such waste and cheap farm products as seem to promise favorable raw materials for the manufacture of industrial alcohol.</p> <p><i>Results.</i>—As a basis for planning future work, a thorough investigation of European conditions of alcohol production has been made. The situation in Germany, where the manufacture of agricultural alcohol has reached its greatest development, seems to afford the most valuable suggestions. There the enterprise has been found to be profitable only when conducted on a large scale, the smallest distillery regarded as practicable from an economic standpoint being much larger than the maximum capacity allowed in this country under the present law.</p> <p>In Germany industrial alcohol manufacture is never considered apart from the general agricultural operation of which it forms a part. Considered by itself, alcohol manufacture in Germany is probably carried on at a loss, but as a part of an agricultural system it constitutes a most important and valuable contribution to the success of the whole. There is ground for the belief that it would be of equal importance in this country if carried on as a part of a somewhat extensive system of farm practice similar to that followed abroad.</p> <p>To test the possibilities of the industry in this country, however, would involve a considerably greater outlay than is here contemplated, and doubtless also, as an initial step, an increase in the present legal limit of capacity of the still. There is continued and urgent demand for information as to the value, as sources of industrial alcohol, of various waste farm and orchard products which are available in considerable quantities, and the work at present is limited to these studies.</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Continued.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Poisonous plant investigations.	Poisonous plant investigations.	Poisonous plant investigations.
(13) Field investigations of loco poisoning..... \$4,512.22 This work includes feeding experiments in ranges and corrals on horses, cattle, and sheep to determine definitely the cause of loco poisoning of animals, to connect different manifestations of the loco disease with the plants occasioning them, and to devise means of reducing the losses now sustained by the stock-grazing interests through loco poisoning. <i>Results.</i> —The field work has developed clearly the cause and symptoms of the loco-weed disease, and methods of treating horses and cattle when conditions permit individual handling were worked out. Nearly all locoed animals, when taken up before the late stages of the disease, can be cured. It has been shown that the most dangerous of the so-called loco weeds of eastern Colorado is the rattle-weed, <i>Aragallus lamberti</i> . Less destructive, but more poisonous, is the woolly loco weed, <i>Astragalus millissimus</i> . Methods of treatment are now being sought by which locoed animals can be restored to usefulness by methods not requiring individual handling of the animals. The plants responsible for the loco-weed disease in eastern Colorado have been determined. The loco trouble as seen in New Mexico, Arizona, and other regions has not yet been thoroughly studied and needs further attention.	(13) Field investigations of loco poisoning..... \$2,350.00	(13) Field investigations of loco poisoning..... \$2,350.00
(14) Laboratory investigations of loco poisoning..... 3,624.03 This work consists of a technical laboratory study of the loco weeds, and of methods of treating locoed animals, to supplement and to aid in the field investigations just described. <i>Results.</i> —The examination of the various species of loco weeds in the laboratory has shown them to contain the element barium, which the plants take up from the soil. During the past year the connection between the loco disease and the presence of this element has been shown to be doubtful, and a further search for the constituents of loco weeds adequate to explain their poisonous nature is being prosecuted, with the object of gaining a scientific basis for further work on antidotes.	(14) Laboratory investigations of loco poisoning..... 3,725.00	(14) Laboratory investigations of loco poisoning..... 2,725.00
(15) Investigations of larkspur poisoning..... 635.42 The object of this work is to ascertain by laboratory and field study the relation of the poisonous activity of larkspurs to time of year, stage of development, etc., and to learn the best methods of meeting the trouble. Next to the loco weeds, the larkspurs are probably the most injurious plants to the grazing interests of the West. In the mountains the damage wrought by them is very great. <i>Results.</i> —Preliminary field surveys have made it apparent that the larkspur situation is so serious as to demand a greater amount of attention than it has heretofore received. Accordingly, plans have been made for a material extension of this investigation. A bulletin on "The Larkspurs as Poisonous Plants" has been issued, dealing with laboratory tests to determine the stage of growth having the greatest toxicity. A field station has been established at Mount Carbon, Colo., for the study of larkspur poisoning, and the fact has been established that much loss, especially of cattle, is due to the eating of larkspur. Some work has been done on methods of antidoting or otherwise treating larkspur poisoning, with promising results. Material has been collected for laboratory investigations with a view to determining the nature of the poisonous principle of larkspurs.	(15) Investigations of larkspur poisoning..... 1,820.83	(15) Investigations of larkspur poisoning..... 2,820.83
(16) Investigations of various stock-poisoning plants..... 702.52 This work includes an investigation of the poisonous action of <i>Zygadenus</i> , or death camas, and the best method of overcoming it; an investigation of the relation of plants to the bighead disease in sheep; and studies of poison ivy, lupines, and various other plants causing disease or death. <i>Results.</i> —Many of the results of these investigations have been published in bulletin form. The field investigations have resulted in establishing many important facts in connection with various plant troubles, and in the laboratory the poisonous principles of many plants have been worked out. Material for laboratory studies of the poisonous action of several species of death camas has been collected from various parts of the country, and the work on this plant, which has been interrupted by the pressure of the loco work, is now being pressed.	(16) Investigations of various stock-poisoning plants..... 1,061.67	(16) Investigations of various stock-poisoning plants..... 2,061.67
(17) Cooperative investigations of stock poisoning on the national forests..... 2,188.82 This work consists of investigations on the national forests and adjacent areas in the West where great losses of stock due to plant poisoning occur. The objects are to	(17) Cooperative investigations of stock poisoning on the national forests..... 4,300.00	(17) Cooperative investigations of stock poisoning on the national forests..... 3,300.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Continued.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATION—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Poisonous plant investigations—Continued.	Poisonous plant investigations—Continued.	Poisonous plant investigations—Continued.
ascertain what plants are causing the great losses in these regions, and to give suggestions as to the treatment of injured animals. Laboratory studies supplement this work. Results.—Investigations have been made of the conditions existing in such of the forests as have been the subject of complaint, with special reference to the distribution of the supposed poisonous plants. Upon the identification and location of the injurious plants, advice as to methods of eradication or of protecting the stock and reducing losses has been furnished. In response to calls from the Forest Service during the past year, a number of forests on which plant poisoning was reported have been visited, and botanical reconnaissances have been made. As a result it has been possible to point out areas dangerous to stock, and to recommend in some cases a change of location of trails so that these poisonous areas can be avoided. In other cases it has been possible to avoid the areas by means of drift fences, and of fences inclosing small areas which were especially dangerous. With the beginning of the present fiscal year the Forest Service has been obliged to withdraw financial support from this project which has been furnished heretofore under terms of cooperation. Accordingly, work in this direction will be somewhat curtailed during the coming year, but every effort will be made to respond to the numerous calls for help in the matter of stock poisoning by plants in the national forests, so far as the reduced means at our disposal will permit.		
	General physiological investigations.	General physiological investigations.
	(18) Study of the effect of dilute solutions of inorganic compounds on plant development..... \$930. 13 This work has been undertaken with a view to affording a better understanding of the physiological requirements of plants and the means of supplying same, by determining the physiological significance of the inorganic plant constituents of farm crops. The work will include a study of the effect exerted on the development of wheat, corn, and other farm crops by minimal quantities of the various inorganic compounds known to influence plant growth, or suspected of influencing plant growth when applied in nontoxic quantities. This work promises important results.	(18) Study of the effect of dilute solutions of inorganic compounds on plant development..... \$930. 13
	(19) Study of the action of organic and inorganic poisons on plants..... 3,008. 33 This work will constitute in part a further step in the study of the physiological requirements of plants, as outlined in the preceding paragraph, and has for its object the working out of the nature and physiological action of substances, organic and inorganic, which are poisonous to cultivated plants and which, under conditions long recognized but not well understood, exert a retarding influence on plant development. The work here outlined has long been needed and will be actively pushed forward. Among the problems which are being undertaken may be mentioned the study of the effects of the absorption by farm crops of harmful substances occurring under usual conditions, as in the plowing in of clover crops; also harmful or retarding influences exerted through the accumulation of toxic substances used in spraying, etc.	(19) Study of the action of organic and inorganic poisons on plants..... 3,008. 33

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Continued.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.	DRUG PLANT, POISONOUS PLANT, AND GENERAL PHYSIOLOGICAL INVESTIGATIONS—Con.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Poisonous plant investigations—Continued.	General physiological investigations—Continued.	General physiological investigations—Continued.
	(20) Study of the toxic excretions of plants..... \$2,075.00	(20) Study of the toxic excretions of plants..... \$2,075.00
	The object of this work is to ascertain in how far plants excrete substances toxic either to themselves or to other plants and to animals. The work will involve the cultivation of different types of plants in different media and under various conditions in such a manner as will make possible the isolation of toxic excreta. It will constitute a further step in the solution of physiological problems bearing on plant development, with special reference to toxic substances known to be elaborated by the plants themselves under various conditions not well understood.	
	A study of the toxic substances which occur in spoiled corn and are believed to cause pellagra, a disease of man now recognized as widely prevalent in the Southern States, has been inaugurated, with a view to determining the nature of these poisons and pointing out practicable methods of avoiding their occurrence.	
	Work dealing with the nature, cause of development, and effect of other important toxic plant excretions is being inaugurated.	
	(21) Study of plant constituents as influenced by special feeding. 854.17	(21) Study of plant constituents as influenced by special feeding. 854.17
	The object of this work is to ascertain in how far the production of alkaloids, glucocides, and other chemical constituents giving value to plants for medicinal purposes may be modified by variations in nutrition and other conditions. The work will involve the cultivation of important drug plants under various conditions as regards the food supply, action of various fertilizers, etc., studied in relation to their effect in modifying the active principle content.	
	This experiment will yield important data in the practical application of principles of plant nutrition, and promises results of great value in the production of American drug plants that will meet the market requirements.	
AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS.	AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS.	AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS.
(N. A. Cobb, technologist in charge.)	(N. A. Cobb, technologist in charge.)	(N. A. Cobb, technologist in charge.)
Salaries, statutory..... \$0.00	Salaries, statutory..... \$720.00	Salaries, statutory..... \$1,920.00
Salaries, lump fund..... 10,444.59	Salaries, lump fund..... 17,180.00	Salaries, lump fund..... 14,900.00
Miscellaneous expenses and supplies..... 8,354.17	Miscellaneous expenses and supplies..... 10,295.25	Miscellaneous expenses and supplies..... 10,305.00
Traveling and field expenses..... 2,973.53	Traveling and field expenses..... 2,600.00	Traveling and field expenses..... 2,600.00
Total..... 21,772.29	Total..... 30,795.25	Total..... 29,725.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Agricultural technology investigations..... 8,436.56	(1) Agricultural technology investigations..... 8,645.00	(1) Agricultural technology investigations..... 8,645.00
This project has as its object the bringing together and coordination of the various lines of technological investigation carried on in the bureau. Laboratory facilities for conducting the work are now available, and such problems as the improvement of agricultural apparatus, improved methods of grading and milling grain, the improvement of methods of illustrating publications, and various technological studies of plant diseases are being worked out.		
Results.—New methods have recently been devised for making a careful examination of the interior of the wheat		

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS—Continued. PROJECTS—continued. <i>General physiological investigations—Continued.</i> grain. Apparatus for work in solar and artificial projection, in connection with lantern-slide and other illustrative work, has been developed, and the cost of illustrating has been reduced thereby. Methods for the comparative measurement of cotton staple, paper fibers, etc., are being developed, and the work is making good progress. (2) Cotton standardization..... \$6,443.44 This work has as its object the establishment of United States standards for the commercial grades of cotton, and is conducted in accordance with recent legislation. Studies of methods of handling the cotton crop, as bearing upon the question of grades, are being made, with a view to bringing about improvements and lessening the damage to the product. <i>Results.</i> —During the past year substantial progress has been made toward the establishment of official grades of American cotton, in accordance with law. In February, 1909, a committee of representative cotton men, called together in Washington, unanimously recommended the adoption of official cotton grades, and submitted a set of types which in its opinion fairly represent the grades sought to be established. Preparations for the promulgation of these grades have been going steadily forward, and it is expected during the coming year to place sets with the principal associations, organizations, exchanges, and agricultural colleges most interested in cotton. It is also hoped that the work of more generally distributing the grades by sale may soon be undertaken. (3) Paper-plant investigations..... 6,892.29 This work consists of tests of various kinds of corn, broom corn, rice, etc., grown under similar conditions in various parts of the country, to determine their respective values for paper making. Wild plants which promise value for paper manufacture are also being tested. The objects of the work are to find a substitute for wood pulp for making paper, to open up new branches of the paper industry, and to provide a market for materials heretofore considered useless or waste. <i>Results.</i> —A good beginning has been made in the investigation of cornstalks, rice straw, and other similar crop materials to determine the value for paper manufacture, in accordance with a recent appropriation made by Congress for this purpose. Arrangements have been made for a series of field and laboratory experiments to determine the comparative fiber value of the crops mentioned, and to secure proper material to serve as the basis for tests on a large scale, in cooperation with paper manufacturers. The laboratory tests will be carried on in cooperation with the Forest Service and the Bureau of Chemistry. It is believed that these experiments will show decisively whether or not paper can be economically produced on a large scale from cornstalks, broom corn, stover, rice straw, and other crop materials which are at present more or less waste products. FIBER INVESTIGATIONS. (Lyster H. Dewey, botanist in charge.) Salaries, statutory..... \$1,000.00 Salaries, lump-fund..... 3,165.00 Miscellaneous expenses and supplies..... 1,920.93 Traveling and field expenses..... 564.07 Total..... 6,650.00 PROJECTS. (1) Hemp investigations..... 1,800.00 The object of this work is to increase the production of hemp in this country by the introduction and development of new varieties. The work during the past year has consisted in growing hemp in new localities and harvesting, retting, and preparing the fiber. Plans for the future contemplate extending this work to other localities, and also the carrying on of hemp-seed selection work in Kentucky and trials of hemp-seed production farther south. <i>Results.</i> —The experiments in the cultivation of hemp in cooperation with the Wisconsin Agricultural Experiment Station have demonstrated that hemp of excellent quality can be grown in that State, and that it kills Canada thistle and checks the growth of quack grass. The limited and uncertain supply of hemp seed is found to be one of the serious obstacles to the expansion of the hemp industry, and plans are being made to remedy this difficulty. (2) Flax-fiber investigations..... 950.00 The object of this work is to develop an American supply of seed of fiber flax, to avoid the necessity of importing seed for sowing, and to encourage the cultivation of flax with better straw, so that the 3,000,000 acres of flax	AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS—Continued. PROJECTS—continued. <i>General physiological investigations—Continued.</i> (2) Cotton standardization..... \$12,005.00 (3) Paper-plant investigations..... 10,145.25 FIBER INVESTIGATIONS. (Lyster H. Dewey, botanist in charge.) Salaries, statutory..... \$1,000.00 Salaries, lump-fund..... 3,620.00 Miscellaneous expenses and supplies..... 1,080.00 Traveling and field expenses..... 950.00 Total..... 6,650.00 PROJECTS. (1) Hemp investigations..... 1,910.00 (2) Flax-fiber investigations..... 1,025.00	AGRICULTURAL TECHNOLOGY, COTTON STANDARDIZATION, AND PAPER PLANT INVESTIGATIONS—Continued. PROJECTS—continued. <i>General physiological investigations—Continued.</i> (2) Cotton standardization..... \$12,005.00 (3) Paper-plant investigations..... 9,075.00 FIBER INVESTIGATIONS. (Lyster H. Dewey, botanist in charge.) Salaries, statutory..... \$1,000.00 Salaries, lump-fund..... 3,670.00 Miscellaneous expenses and supplies..... 980.00 Traveling and field expenses..... 1,000.00 Total..... 6,650.00 PROJECTS. (1) Hemp investigations..... 1,900.00 (2) Flax-fiber investigations..... 1,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIBER INVESTIGATIONS—Continued.	FIBER INVESTIGATIONS—Continued.	FIBER INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
grown for seed annually in this country may be utilized to supply in part the demand for flax fiber, the imports of which now amount to \$2,000,000 annually. <i>Results.</i> —Work in the selection of seed for the breeding of pedigree fiber flax has been begun, and gives promise of valuable results. Improved methods for harvesting flax and preparing the fiber have been studied. In cooperation with the North Dakota Agricultural Experiment Station a Farmers' Bulletin on "Flax Culture" has been published and distributed to growers. This bulletin has special reference to the production of flax for fiber purposes and the development of improved and disease-resistant varieties.		
(3) Sisal and henequen fiber investigations..... \$1,200.00 This work consists of a study of the sisal and henequen industries with a view to establishing these industries in Porto Rico, and extending the work into Hawaii. The other Agaves yielding fiber similar to sisal are also being studied, to determine whether they are suitable for cultivation in Florida, southern Texas, or the southwestern United States. <i>Results.</i> —The sisal and henequen plants introduced by this department into Porto Rico are growing well there, and have been set out in a plantation under the care of the Porto Rico Experiment Station. A small number of sisal, henequen, and zapupe plants have made a promising growth on the dry mesa at the South Texas Garden of this bureau, at Brownsville, and it is deemed advisable to undertake an experiment there on a more extensive scale.	(3) Sisal and henequen fiber investigations..... \$1,160.00	(3) Sisal and henequen fiber investigations..... \$1,250.00
(4) Ramie fiber investigations..... 500.00 The objects of this investigation are to ascertain whether ramie is a profitable plant for southern farmers, and to furnish prospective growers with accurate information regarding methods employed in producing ramie. Preliminary experiments in the cultivation of ramie are also being made. Information regarding the progress toward the development of the ramie industry in other countries is being collected, with a view to the encouragement of the industry in this country as soon as the conditions promise success. <i>Results.</i> —Many prospective investors in ramie culture, misled by tales of promoters, have been furnished with information that has saved them from wasting time and money. Experiments made during the past year emphasize the fact that under new conditions young ramie plants will not survive a severe drought, and further, that if irrigated the furrow system must be used, as the plants are killed by flooding.	(4) Ramie fiber investigations..... 400.00	(4) Ramie fiber investigations..... 300.00
(5) Phormium fiber investigations..... 450.00 The object of this investigation is to determine whether phormium, the fiber plant of New Zealand, may be grown successfully for fiber production in the Southern States. This is the only important hard-fiber plant growing in the temperate climate. <i>Results.</i> —Preliminary experiments have been made at three points in the Southern States with roots and seeds obtained from nurserymen, direct from New Zealand. Plants from roots are growing well at New Orleans, and more extended experimental planting seems warranted there. Results with seed have not been successful, and it has been learned that seeds are not used for propagating the plants in New Zealand.	(5) Phormium fiber investigations.. 500.00	(5) Phormium fiber investigations 400.00
(6) Abaca (Manila hemp) fiber investigations..... 500.00 The object of this work is to determine whether abaca (manila hemp), producing the most valuable hard fiber of commerce, can be cultivated successfully in Porto Rico and Hawaii. Experiments are being made in these islands with seedlings from abaca seeds brought from the Philippines. <i>Results.</i> —The plants continue to grow in Porto Rico and multiply by suckers, but they do not make a growth that is at all promising for fiber production. It is now learned that in the Philippines good plants are rarely secured from seedlings, and furthermore that many distinct varieties, differing in soil and climatic requirements, are recognized. Plans are therefore being made to secure suckers of more promising varieties.	(6) Abaca (Manila hemp) fiber investigations..... 525.00	(6) Abaca (Manila hemp) fiber investigations..... 300.00
(7) Testing of plant fibers..... 1,250.00 The object of this work is to secure accurate information as to the strength and measurements of textile fibers, and to furnish other offices of the Bureau, engaged in breeding cotton, with correct information regarding strength and measurements of cotton fibers from the plants which they are developing. <i>Results.</i> —Thousands of measurements have been made of the actual breaking strain of cotton fiber of different varieties, or grown under different conditions. Cotton breeders have thus been enabled to discard strains producing weak fiber, and to select those with stronger lint. Valuable information has also been secured regarding the relative tensile strength of long fibers.	(7) Testing of plant fibers..... 1,130.00	(7) Testing of plant fibers..... 1,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
TAXONOMIC AND RANGE INVESTIGATIONS. (Frederick V. Coville, botanist in charge.)	TAXONOMIC AND RANGE INVESTIGATIONS. (Frederick V. Coville, botanist in charge.)	TAXONOMIC AND RANGE INVESTIGATIONS. (Frederick V. Coville, botanist in charge.)
Salaries, statutory..... \$4,920.00	Salaries, statutory..... \$5,520.00	Salaries, statutory..... \$6,120.00
Salaries, lump-fund..... 13,726.67	Salaries, lump-fund..... 13,180.00	Salaries, lump-fund..... 12,580.00
Miscellaneous expenses and supplies..... 2,318.96	Miscellaneous expenses and supplies..... 2,820.00	Miscellaneous expenses and supplies..... 2,820.00
Traveling and field expenses..... 2,166.37	Traveling and field expenses..... 2,250.00	Traveling and field expenses..... 2,250.00
Total..... 23,132.00	Total..... 23,770.00	Total..... 23,770.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work..... 4,223.97	(1) General supervisory and office work..... 3,937.00	(1) General supervisory and office work..... 3,937.00
This project includes the general planning and supervision of all taxonomic and related investigations; the carrying on of correspondence; and other details connected with the field and laboratory work.		
<i>Results.</i> —The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs:		
(2) Improvement of forest grazing areas..... 2,293.28	(2) Improvement of forest grazing areas..... 2,540.00	(2) Improvement of forest grazing areas..... 2,540.00
This work is conducted in cooperation with the Forest Service, and consists of (1) a study of the life history of the principal forage plants in the national forest ranges and experiments in grazing at different seasons to determine its effect on increase or decrease of forage; (2) an experiment in pasturing a band of sheep, without herding, in a coyote-proof inclosure, to ascertain to what extent the condition of the sheep and the pasturage will be improved under this system as contrasted with the ordinary herding system; and (3) experiments in the artificial seeding of destructively overgrazed areas. The object is the development of some system of grazing whereby the forest grazing lands may be made to carry more stock.		
<i>Results.</i> —The coyote-proof pasture experiment has demonstrated that when a band of sheep is freed from the worry of a herder and his dogs and from the fear of wild animals, it used 30 per cent less grass, the losses by death were reduced from 3 per cent to one-half of 1 per cent, the lambs were 8 pounds heavier, and that one man can handle four times as many sheep.		
The natural reseeding experiment has demonstrated that by keeping stock off an overgrazed area during the early part of the season and pasturing it after the maturity of the seed crop, a thorough reseeding of mountain bunch-grass is secured; and that the stand of seedlings is better where the seed was tramped into the ground by the sheep than where it was left on the surface without treatment or was worked into the soil with a brush harrow.		
(3) Preparation of a manual of American grasses..... 4,975.00	(3) Preparation of a manual of American grasses..... 5,475.00	(3) Preparation of a manual of American grasses..... 5,475.00
This work consists of the collection, identification, and description of the various American grasses, with a view to the preparation of a manual containing authentic information regarding the habitat, manner of growth, and useful qualities of each species. The work is mainly performed in Washington, D. C., supplemented by field investigations in the Western States when necessary.		
<i>Results.</i> —Two papers have been prepared and published, entitled respectively, "Type specimens of American grasses in European herbaria" and a "Catalogue of the grasses of Cuba." A technical revision of the genus <i>Panicum</i> , one of the largest and most difficult groups of American grasses, is nearing completion.		
The grasses received by the Office of Foreign Seed and Plant Introduction have been identified and that office has been furnished with information to guide agricultural explorers in securing valuable grasses for trial. A digest of notes and observations as to the value of the different species of grasses for forage and for other economic purposes is being made.		
(4) Preparation for publication of notes on the useful plants of the Southwest and Mexico..... 1,900.00	(4) Preparation for publication of notes on the useful plants of the Southwest and Mexico... 1,900.00	(4) Preparation for publication of notes on the useful plants of the Southwest and Mexico.... 1,900.00
This work has for its object the embodiment in bulletin form of the store of valuable information regarding the identity, production, preparation, and uses of American plants contained in the notes made by Dr. Edward Palmer during the past fifty years in the western United States, Mexico, and South America. Full information as to the commercial importance of these plants at the present time will also form a part of the publication.		
<i>Results.</i> —Good progress is being made toward the completion of the work, which covers the useful plants, trees, fruits, fibers, resins, balsams, oils, barks, medicinal products, dyes, tan-stuffs, woods, etc., of the southwestern United States and Mexico. Much has been done in identifying the species to which they belong; fixing accurately the localities cited; and supplementing the information when necessary by obtaining additional material or notes, to establish the identity of a plant or tree or to corroborate statements regarding the properties of vegetable products.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Cataloguing of the literature of botany..... \$2,300.00	(5) Cataloguing of the literature of botany..... \$2,300.00	(5) Cataloguing of the literature of botany..... \$2,300.00
<p>This work consists of the cataloguing of botanical works and periodicals, in order to make them available to the investigators in all lines, and with special reference to the preparation of a catalogue of the botanical works to be found in the various libraries in Washington, D. C. The object is to provide increased facilities for access to literature in botanical investigations.</p> <p><i>Results.</i>—Before this work was undertaken there was much unnecessary duplication in the purchase of botanical books in the various government libraries in Washington, and many rare and important works needed by botanical investigators and not supposed to be in the city were in fact here. The catalogue is an inestimable saving of time to men engaged in research and adds greatly to the efficiency of their work.</p>		
(6) Study of the utilization of wild plants, etc..... 717.25	(6) Study of the utilization of wild plants, etc..... 1,068.00	(6) Study of the utilization of wild plants, etc..... 1,068.00
<p>Under this heading are grouped various lines of investigation which are carried on as incidental to the main features of the taxonomic and other work. These investigations include a study of the economic value of the Oregon wild prunes, with a view to the development by breeding of plums and prunes suited to conditions of aridity and cold; a monographic study of the genus <i>Ribes</i>, including the experimental cultivation of promising wild species of currants and gooseberries; experiments in the domestication of the native blueberry, with a view to its commercial culture, and studies of various other plants, including the vegetation of Alaska and the wild plants used by the American aborigines.</p> <p><i>Results.</i>—Promising varieties of the Oregon wild prunes have been secured, which will prove valuable for breeding purposes. On account of the remarkable resistance of these plums to cold and drought, their cultivation is regarded as of great promise, especially in the region in which they grow in a wild state.</p> <p>Experiments in the domestication of the swamp blueberry, which have been carried on for three years, have resulted in the working out of the conditions under which this plant may be propagated and grown successfully in pot cultures. The results of these experiments will be published. The prospects for the introduction of the blueberry into cultivation on acid soils, now regarded as of little value, are very good.</p> <p>A manual of the flora of Alaska is nearly completed, which will contain authentic information on the vegetation of that Territory. Valuable data have also been collected from the Indians regarding the uses to which they put various wild plants.</p>		
(7) Economic collections of cultivated plants..... 6,722.50	(7) Economic collections of cultivated plants..... 4,812.50	(7) Economic collections of cultivated plants..... 4,812.50
<p>This work includes the collection and identification of specimens of cultivated or useful plants, especially such as are being introduced by the department from foreign countries. The objects are to aid in the work of plant introduction and also to preserve for reference and study authentic and correctly named specimens of all cultivated plants.</p> <p><i>Results.</i>—Of the plants offered for sale by nurserymen and seedmen an unnecessarily large percentage are incorrectly named. Purchasers are misled and the progress of agriculture and horticulture suffers. The work of the Economic Collections, where critical botanical studies of such plants are made, has been of great assistance to both purchaser and dealer, often obviating serious losses.</p> <p>These collections also enable the identity of introduced plants to be established, and therefore insure the recording of information concerning the trial of a given introduction under the correct name of the species and variety. A large part of the work is conducted in cooperation with other offices of the Bureau of Plant Industry.</p>		
	(8) Botanical study of fruits, nuts, etc..... 1,737.50	(8) Botanical study of fruits, nuts, etc..... 1,737.50
	<p>The object of this study is the preparation of a publication which will give accurate information concerning the species, and their relationship, from which the various varieties of fruits and nuts cultivated in America have originated. A study is also being made of the botanical origin and varietal classification of the potato, to determine the wild species from which the cultivated potato has been derived, as well as to discover the relationship of the wild forms of tuber-bearing So-</p>	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.	TAXONOMIC AND RANGE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	lanums to the cultivated potato, and whether any of them are resistant to disease. <i>Results.</i> —Numerous errors have been discovered in the present botanical classification of the varieties of plums, and with the correction of these errors many facts of primary importance to the breeder are being brought to light. In the study of the potato it has been found that the numerous forms of tuber-bearing Solanums in Mexico are distinct botanically from the cultivated potato, and that the wild form of the latter was probably restricted to a limited area in South America. Several errors in identification of tuberous Solanums now being experimented with by the bureau in the production of disease-resistant varieties have also been corrected.	
SEED-TESTING LABORATORIES.	SEED-TESTING LABORATORIES.	SEED-TESTING LABORATORIES.
(Edgar Brown, botanist in charge.)	(Edgar Brown, botanist in charge.)	(Edgar Brown, botanist in charge.)
Salaries, statutory..... \$3,152.50	Salaries, statutory..... \$4,940.00	Salaries, statutory..... \$4,940.00
Salaries, lump fund..... 17,229.43	Salaries, lump fund..... 21,452.00	Salaries, lump fund..... 21,490.00
Miscellaneous expenses and supplies..... 2,714.84	Miscellaneous expenses and supplies..... 3,348.00	Miscellaneous expenses and supplies..... 3,300.00
Traveling and field expenses..... 2,116.40	Traveling and field expenses..... 1,750.00	Traveling and field expenses..... 1,750.00
Total..... 25,213.17	Total..... 31,490.00	Total..... 31,480.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work..... 5,906.75 This project includes the planning and direction of the seed work both in the laboratory at Washington and in the field, the conduct of correspondence, and other details connected with the seed investigations. <i>Results.</i> —The results under this project are reflected in the progress noted under all the other projects described in the following paragraphs.	(1) General supervisory and office work..... 6,071.00	(1) General supervisory and office work..... 6,061.00
(2) Seed testing, Washington, D. C..... 6,137.84 This work includes the making of tests for germination and mechanical purity of samples of seeds submitted for that purpose, the perfecting of seed-testing apparatus, and propaganda work with a view to popularizing seed testing. <i>Results.</i> —This work has done much to bring about general interest in better seeds, as shown by the larger number of samples received from farmers and seedsmen each year and the fact that the demand for high-grade seeds is increasing each year.	(2) Seed testing, Washington, D. C. 7,097.00	(2) Seed testing, Washington, D. C. 7,097.00
(3) Adulterated-seed investigations..... 5,087.58 This work is carried on in accordance with the law authorizing the Secretary of Agriculture to obtain samples of grass and forage plant seeds in the open market, to test the same, and wherever the seeds are found to be adulterated to publish the results of these tests, with the names of the dealers by whom they were offered for sale. <i>Results.</i> —The effect of this work has been to decrease the sale of adulterated seeds. The number of lots of seed found to be adulterated during each of the past two years is less than one-half the number found previously. The adulteration of farm seeds is now practically confined to Kentucky bluegrass and orchard grass.	(3) Adulterated-seed investigations. 4,865.00	(3) Adulterated-seed investigations 4,865.00
(4) Pure-seed investigations..... 4,597.45 The object of this work is to study impurities of seeds received at the laboratories, and to study the distinguishing characters of closely allied economic seeds in order to be able to disseminate information as to the identity of various classes of commercial seeds. <i>Results.</i> —Sets of 100 kinds of weed seeds commonly found in commercial seeds, as well as sets of 100 kinds of economic plant seeds for the use of schools, have been prepared and are being distributed. A number of experiment-station workers and others have availed themselves of the opportunities offered by the Seed Laboratory to gain a practical knowledge of this work. Several papers have been published giving the results of seed studies and pointing out the way in which the various seeds of closely related plants may be distinguished.	(4) Pure-seed investigations..... 5,320.00	(4) Pure-seed investigations..... 5,320.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SEED-TESTING LABORATORIES—Continued.	SEED-TESTING LABORATORIES—Continued.	SEED-TESTING LABORATORIES—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Seed-vitality investigations..... \$206.00 This work consists of germination tests of various classes of seeds. At the present time special attention is being given to a study of the germination of seeds in order to determine the conditions required by seeds of various kinds of plants for rapid and complete germination. <i>Results.</i> —Publications have been issued showing the proper methods to be followed in making laboratory tests for the germination of the more common seeds. Information has also been published relative to the proper conditions for harvesting and storing seeds on a commercial basis under conditions which will preserve their vitality. About 3,750 packets of vegetable seeds as offered by local merchants have been tested for germination during the past year. The results corresponded very closely with those obtained during the two previous years, the average germination being less than 62 per cent. It is important to note that the average germination of the seeds put up by the same firms has, with few exceptions, remained nearly constant. The difference in the quality of the seeds sold by different firms is surprisingly great, the average germination of seeds for three years from one firm being 37 per cent and from another firm 81 per cent.	(5) Seed-vitality investigations..... \$1,805.00	(5) Seed-vitality investigations..... \$1,805.00
(6) Cooperative seed-testing laboratory, Lincoln, Nebr..... 1,646.95 The object of this laboratory, which is conducted in cooperation with the Nebraska Agricultural Experiment Station, is to test samples of seed for farmers and seedsmen in the State of Nebraska and adjacent territory, making it possible to save the delay in sending samples to Washington. <i>Results.</i> —This laboratory has been in operation two years, and its importance is shown by the number of samples which have been submitted for testing each year, about 50 per cent more samples having been submitted last year than during the year preceding. Two reports showing the results of the work of this laboratory have been published by the Nebraska Agricultural Experiment Station.	(6) Cooperative seed-testing laboratory, Lincoln, Nebr..... 1,870.00	(6) Cooperative seed-testing laboratory, Lincoln, Nebr..... 1,870.00
(7) Cooperative seed-testing laboratory, Columbia, Mo..... 1,630.60 This laboratory, which is conducted in cooperation with the Missouri Agricultural Experiment Station, is similar in its objects and work to the Nebraska laboratory, just described. <i>Results.</i> —This laboratory has afforded the farmers of Missouri and of adjacent States, especially in the South and West, an opportunity to have their seeds tested promptly. The laboratory has been in operation one year.	(7) Cooperative seed-testing laboratory, Columbia, Mo..... 1,862.00	(7) Cooperative seed-testing laboratory, Columbia, Mo..... 1,862.00
	(8) Cooperative seed-testing laboratory, Corvallis, Oreg..... 2,600.00 This laboratory has been established during the present fiscal year in cooperation with the Oregon Agricultural Experiment Station. Its object is similar to that of the other two laboratories in the field, viz, to test seeds for residents of the Pacific Coast and Northwestern States and to aid in improving the quality of agricultural seeds sold in that region.	(8) Cooperative seed-testing laboratory, Corvallis, Oreg..... 2,600.00
GRAIN STANDARDIZATION. (John D. Shanahan, technologist in charge.)	GRAIN STANDARDIZATION. (John D. Shanahan, technologist in charge.)	GRAIN STANDARDIZATION. (John D. Shanahan, technologist in charge.)
Salaries, statutory..... \$1,415.00	Salaries, statutory..... \$2,460.00	Salaries, statutory..... \$3,840.00
Salaries, lump fund..... 30,100.32	Salaries, lump fund..... 35,190.00	Salaries, lump fund..... 34,290.00
Miscellaneous expenses and supplies..... 12,870.44	Miscellaneous expenses and supplies..... 9,750.00	Miscellaneous expenses and supplies..... 9,750.00
Traveling and station and field expenses..... 8,619.07	Traveling and station and field expenses..... 7,500.00	Traveling and station and field expenses..... 6,980.00
Total..... 53,004.83	Total..... 54,900.00	Total..... 54,860.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative and supervisory work..... 9,980.73 This project includes the direction and supervision of all work in grain standardization, embracing the laboratories maintained at the principal grain centers of the United States, the investigations of the interstate and ocean transportation and storage of grain, and the other features of the work, the energies of which are being exerted toward bringing about a better understanding of the relations between the methods of handling, storing, transporting, and inspecting grain and grain values. <i>Results.</i> —The results under this project are reflected in the progress and results under all the other projects, described hereafter, and are being manifested in many ways, principally in the increased activities of influential grain dealers toward bringing about more satisfactory conditions with relation to grain inspection and grading.	(1) Administrative and supervisory work..... 9,810.00	(1) Administrative and supervisory work..... 7,360.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1232); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN STANDARDIZATION—Continued. PROJECTS—continued.	GRAIN STANDARDIZATION—Continued. PROJECTS—continued.	GRAIN STANDARDIZATION—Continued. PROJECTS—continued.
(2) Laboratory investigations in grain standardization, Washington, D. C. \$6,820.01 This work includes general investigations and research bearing on the methods of grain inspection, grading, storing, etc., with the object of improving these methods, of ascertaining the cause of deterioration in grain in storage and transit, and of effecting an equitable and scientific method of grading grain; also to collect such information and data as will eventually enable the Department of Agriculture to establish United States standards for the commercial grades of grain. <i>Results.</i> —A special apparatus for determining the moisture content of grain has been devised which makes it possible for one man to determine in approximately thirty minutes the moisture content of twelve samples of grain, and has proved an important factor in the education of the grain shipper and grain handler with regard to the effect of the moisture content on grain values. This result is being reflected back to the farm, where it is causing greater care to be taken of grain. Experiments with corn stored in elevators have emphasized the importance of moisture content as a factor in keeping quality, corn of relatively high moisture content becoming heated to a temperature of 130° to 140° F., while corn of lower moisture content under similar conditions remained normal.	(2) Laboratory investigations in grain standardization, Washington, D. C. \$7,150.00	(2) Laboratory investigations in grain standardization, Washington, D. C. \$7,000.00
(3) Trans-Atlantic grain transportation investigations (headquarters during shipping seasons, London, England). . . 2,386.86 This work has consisted of the examination of cargoes, and samples taken from such cargoes, of American export grain shipped from various points in the United States upon arrival at European ports, with the object of securing definite information regarding the condition on arrival of American export grain and to determine the causes of deterioration of such grain during ocean transit. Such information is of great value in the general work of grain standardization and in devising means of improving the conditions of ocean transportation of grain. <i>Results.</i> —This work was so planned as to be in full operation by the time the early shipments of American corn during the past few seasons were received by European buyers. Nearly all of the more important European grain markets were visited and samples of grain from incoming cargoes were secured for the purpose of determining the quality and condition of grain exported from the United States and other grain-exporting countries at the time of discharge at European ports. These investigations have shown that much of the corn from the United States arrived in Europe in a badly damaged condition, caused by excessive moisture in the grain and by heat from the ships' boilers. All of the information secured in this work is being put to practical use in the grain standardization work in the United States, and the results are now ready for publication. The investigations have resulted in showing the necessity for several important improvements in methods of conducting our export grain trade.	(3) NOTE.—This project is not in operation during the present fiscal year.	(3) Trans-Atlantic grain transportation investigations. 2,000.00 NOTE.—It is planned for the next fiscal year to supplement the information already obtained by making some studies of grain in transit to Europe in ships, in order to secure definite knowledge of the action of the various factors of deterioration.
(4) Interstate grain transportation investigations (laboratory headquarters at Decatur, Ill.) 3,810.00 The object of these investigations is to ascertain the changes which take place in grain during transit in railroad cars and lake steamers. The factors of condition and quality, including the moisture and temperature of the grain, together with the relative humidity and temperature of the air at the time of loading and also at the time of discharge at destination, are being studied. <i>Results.</i> —This work was inaugurated during the latter part of the fiscal year 1908. Careful determinations of the various factors influencing the carrying quality of grain are being made, and the work, which has an important bearing on the general question of grain standardization, is being vigorously prosecuted. One car of corn examined at destination contained 22.9 per cent of moisture and showed a temperature of 125° F. In cooperation with the Illinois Central Railroad and its terminal elevators special attention is being given to shipments of corn from the central corn belt to New Orleans, observations being made at point of shipment, en route, at destination, and while in storage in destination elevators. Experiments with stored grain are being carried on at Baltimore, Md., in cooperation with the elevators of the Baltimore and Ohio Railroad.	(4) Interstate grain transportation investigations. 5,400.00	(4) Interstate grain transportation investigations. 5,500.00
(5) Grain standardization laboratory, Baltimore, Md. 3,755.00 The work at Baltimore, as well as at all of the other grain standardization laboratories located at the principal grain centers, consists chiefly in making definite determinations of the moisture content, the different kinds and degrees of damage, the factors of color, the kinds and amount of impurities, the weight per bushel, the weight per 1,000 kernels, etc., of samples of grain either obtained personally by officers of the Bureau of Plant Industry or submitted for examination by grain merchants or chief inspectors of local grain inspection departments. Baltimore is a semisouthern grain market	(5) Grain standardization laboratory, Baltimore, Md. 5,100.00	(5) Grain standardization laboratory, Baltimore, Md. 5,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN STANDARDIZATION—Continued. PROJECTS—continued.	GRAIN STANDARDIZATION—Continued. PROJECTS—continued.	GRAIN STANDARDIZATION—Continued. PROJECTS—continued.
through which large quantities of corn are annually exported. <i>Results.</i> —In all cities where laboratories have been established the local exchanges have entered into cordial cooperation with the Department of Agriculture, and it is believed that much good has been accomplished in bringing about a more general feeling that work of this character is practical and much to be desired by inspectors, shippers, receivers, and consumers of grain. A number of cases have been brought to the attention of the department where the reports of the laboratories have determined the action taken in appeals and have otherwise served in the satisfactory adjustment of disputes and claims. At Baltimore the most cordial cooperation has been rendered by the Baltimore Chamber of Commerce, and much information of use in the general work of grain standardization has been secured, especially with regard to grain stored in elevators and being shipped for export.		
(6) Grain standardization laboratory, New York, N. Y. \$4,250.00 The work at this laboratory is essentially the same as in the Baltimore laboratory, just described. New York, being the largest export grain market in the country, affords excellent opportunity for studying a wide range of grain problems. <i>Results.</i> —In common with the other laboratories, studies of grain marketing conditions in the port of New York and vicinity have been made; cordial cooperation has been had from the New York Produce Exchange and assistance has been rendered its members through tests and analyses of samples of grain.	(6) Grain standardization laboratory, New York, N. Y. \$4,520.00	(6) Grain standardization laboratory, New York, N. Y. \$4,500.00
(7) Grain standardization laboratory, St. Louis, Mo. 3,695.00 The work at this laboratory is essentially the same as that described under the Baltimore laboratory. St. Louis is advantageously located in the central grain section and is the largest soft red winter wheat market in the United States. <i>Results.</i> —Studies of grain marketing conditions peculiar to this section of the country are being made. Many commercial grain samples have been analyzed, and the cordial cooperation of the Merchants' Exchange of St. Louis has been secured for the work.	(7) Grain standardization laboratory, St. Louis, Mo. 3,900.00	(7) Grain standardization laboratory, St. Louis, Mo. 4,000.00
(8) Grain standardization laboratory, Minneapolis, Minn. 3,170.00 The work at this laboratory is essentially similar to that in the other laboratories. Minneapolis is situated in the largest spring wheat market in the United States and presents excellent opportunity for studying marketing conditions in the Northwest. <i>Results.</i> —Studies have been made of the relative market values of the different kinds and classes of spring wheat, and also of the dockage system of grading and its effect upon grain values. Many samples have been analyzed for members of the chamber of commerce and many samples collected for milling experiments.	(8) Grain standardization laboratory, Minneapolis, Minn. 3,900.00	(8) Grain standardization laboratory, Minneapolis, Minn. 4,000.00
(9) Grain standardization laboratory, Duluth, Minn. 2,237.23 The work at this laboratory was essentially similar to that at the other laboratories. Duluth is the largest export point for northwestern spring wheat. <i>Results.</i> —A considerable amount of information regarding the exporting of spring wheat via the Great Lakes was obtained during the operation of the Duluth laboratory. The most cordial support was given the work at this point by the Duluth Board of Trade.	(9) Discontinued. The Duluth laboratory was discontinued because it was found that the work could be combined with that of the Minneapolis laboratory to advantage to the work as a whole.	(9) Discontinued. See note in 1910 column.
(10) Grain standardization laboratory, New Orleans, La. 3,655.00 The work at this laboratory is essentially similar to that at the other laboratories, previously described. New Orleans is an extreme southern or gulf port export grain market, through which large quantities of northern-grown corn are annually exported, thus affording excellent opportunity for studying the effects of extreme climatic changes upon grain. <i>Results.</i> —In collaboration with the other laboratories and projects, the New Orleans laboratory has assisted in working out problems in the storage and transportation of grain. Analyses of a large number of grain samples have been made for the grain-inspection department of the New Orleans Board of Trade, whose cordial cooperation has been a valuable feature of the work.	(10) Grain standardization laboratory, New Orleans, La. 3,900.00	(10) Grain standardization laboratory, New Orleans, La. 4,000.00
(11) Grain standardization laboratory, Chicago, Ill. 6,115.00 The work at this laboratory is essentially similar to that at the other laboratories. Chicago is the largest primary grain market in the world, affording especially good facilities for studying questions in connection with the grain business generally. <i>Results.</i> —Information and data have been collected regarding grain marketing conditions at Chicago and vicinity. A large number of cars of grain destined to points where other laboratories are located have been examined. Special studies have been made of the bleaching of grain, and a simple method of detecting bleached barley and oats has been devised and described in the form of a publication. Many samples of grain have been analyzed for the trade. The work at Chicago has the hearty cooperation of the Chicago Board of Trade, who urgently requested its inauguration.	(11) Grain standardization laboratory, Chicago, Ill. 5,820.00	(11) Grain standardization laboratory, Chicago, Ill. 5,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.	GRAIN STANDARDIZATION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(12) Wheat milling and baking tests, Fargo, N. Dak. \$3,130.00 This work is conducted at the experimental flour mill of the North Dakota Agricultural Experiment Station, through a cooperative arrangement with that station. The object is to determine the relative flour and bread values of the different classes and varieties of wheat grown in the United States, in so far as these qualities relate to their commercial grades. This information will greatly aid in fixing just, uniform, and intelligent grades for wheats. <i>Results.</i> —The wheats grown in the various sections of the United States have been studied, and the work of collecting samples of the different kinds, classes, and varieties of wheat grown in various sections, as well as pure strains from the state experiment stations, is being carried on. Good progress has been made in testing them for milling and baking properties and in segregating the various factors of value and giving each factor its proper value for standardization purposes.	(12) Wheat milling and baking tests, Fargo, N. Dak. \$5,400.00	(12) Wheat milling and baking tests, Fargo, N. Dak. \$5,500.00
GRAIN INVESTIGATIONS.	GRAIN INVESTIGATIONS.	GRAIN INVESTIGATIONS.
(M. A. Carleton, cerealist in charge.)	(M. A. Carleton, cerealist in charge.)	(M. A. Carleton, cerealist in charge.)
Salaries, statutory \$3,569.44 Salaries, lump-fund 31,845.60 Miscellaneous expenses and supplies 3,366.93 Travelling and field expenses 10,181.33 Total 48,963.30	Salaries, statutory \$3,560.00 Salaries, lump-fund 37,075.00 Miscellaneous expenses and supplies 6,025.00 Traveling and field expenses 8,350.00 Total 55,010.00	Salaries, statutory \$5,360.00 Salaries, lump-fund 36,500.00 Miscellaneous expenses and supplies 4,575.00 Traveling and field expenses 8,500.00 Total 54,935.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative and supervisory work 6,863.67 This project includes the planning and direction of the field work, the conduct of correspondence, all necessary traveling expenses in supervising the work, and other details connected with the investigations. <i>Results.</i> —The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs.	(1) Administrative and supervisory work 7,956.00	(1) Administrative and supervisory work 8,155.00
(2) Wheat investigations 5,887.53 These investigations include the improvement of hard spring wheat for the Northwest; a continuation of the investigations of durum wheat; the extension of the winter wheat area; wheat experiments in California, and other problems connected with the wheat growing industry. The project covers much breeding, adaptation, and introduction work with a view to the development of improved varieties and their introduction into extensive cultivation. <i>Results.</i> —The new grain crop, durum wheat, which produces annually over fifty million bushels, is a direct result of this work. It has now been established agriculturally for several years, and chief attention at present is being directed toward the growing of pure types of the best varieties. The Kubanka has been found to be the best variety for bread flour. The opposition to the wheat among millers has gradually diminished until now some of the best mills have been urging its further exploitation. The amount being used by the mills is rapidly increasing each year, while the export is about 20,000,000 bushels annually. A number of wheat hybrids have been well fixed and some of these are already found to be of considerable value. Greater earliness in the Turkey wheat has been secured by crossing with the Zimmerman, a well-known early variety. Another hybrid of much promise is one produced by crossing durum wheat upon the hard spring wheat, which appears to have the bread-making qualities of the common spring and the rust resistance of the durum. The area of Kharkov winter wheat has been extended to southern North Dakota and westward to the one-hundredth meridian, this variety having been found to be considerably more resistant to drought than the Turkey and allied varieties. There are now probably more than 10,000,000 bushels of the Kharkov wheat produced annually. After several years' experiments the Chul wheat introduced from Turkestan has been found to be well adapted for use in California, and a number of successful milling tests have given it an excellent reputation among millers. These results will have the effect of practically revolutionizing the wheat industry in California, for the reason that heretofore, the native wheat being so starchy, it has been necessary to import from Kansas practically half of the wheat used by the mills, which is blended with the native wheat to furnish sufficient gluten. The excellent quality of the Chul wheat will make it unnecessary to import the Kansas wheat.	(2) Wheat investigations 5,970.00	(2) Wheat investigations 6,495.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p>GRAIN INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>A number of improved strains of hard spring wheat have been distributed through the Minnesota and North Dakota experiment stations. These include the well-known new varieties Minnesota 163, 169, and 188, and also the Ghirka spring, a very hardy drought resistant sort of excellent quality introduced into South Dakota from eastern Russia.</p> <p>(3) Oat investigations..... \$4,600.59</p> <p>This work includes the breeding and improvement of oats in the northern Mississippi Valley, the great oat producing section of the United States, where adaptation and breeding work is being carried on in cooperation with several of the state experiment stations with the object of securing better yielding varieties of higher quality than those now generally grown. The work also includes the dissemination of the Swedish Select, Sixty Day, and other improved oat varieties; the development of hardy, high yielding winter oats and the extension of the winter oat area, as well as the selection of strains particularly adapted to oatmeal manufacture, and for other purposes.</p> <p><i>Results.</i>—Another year's test of the Sixty Day oat further demonstrates its value for the corn belt, where its earliness makes it particularly desirable. In the Northern States, the Swedish Select variety continues to grow in favor. Approximately 40,000,000 bushels of this oat are now produced annually, nearly 30,000,000 of which are grown in the State of Wisconsin alone. Improved strains of these varieties are being developed, several of which will soon be ready for distribution.</p> <p>The hybrids of Sixty Day and Burt seem particularly promising for the corn belt, while other hybrids promise much for the northern and irrigated sections. Some of the hardier winter strains are earlier, and appear to be better yielders, than any winter sorts now commonly grown.</p> <p>(4) Barley investigations..... 2,172.58</p> <p>This work is carried on along four separate lines, viz, the general improvement of existing spring varieties of barley by means of selections and hybrids; the distribution of newly introduced varieties into favorable localities; the introduction and improvement of winter barley, and the securing of barleys adapted to high altitudes of the West.</p> <p><i>Results.</i>—Several important barley hybrids have been produced, two types of beardless and several forms both beardless and hull-less being most promising. These beardless types will make the growing of barley more popular, as the beards are objectionable to growers. Odessa, a Manchurian type of barley introduced and distributed by the department, has outyielded the common varieties in the Northwest and will prove a valuable addition to the grain crops of that region.</p> <p>Winter barley has now become a well established crop in Kansas and other States of the Middle West where only a few years ago it was not thought possible to grow this cereal. The advantage in its introduction is that it furnishes fall and winter pasturage and yields considerably more than spring barleys.</p> <p>The beardless and hull-less barleys, introduced from Asia and distributed throughout the Rocky Mountain States, have demonstrated their value as grain producers at high altitudes by maturing crops at 8,000 feet in Idaho and 9,800 feet in Colorado.</p> <p>(5) Grain sorghum investigations..... 2,925.17</p> <p>This work comprises adaptation tests of domestic and introduced varieties of sorghum to determine those best suited to particular sections; breeding and selection experiments to increase earliness, dwarfishness, hardiness, and productiveness; and cultural tests to ascertain the proper methods of planting and harvesting the crop. The object of the work is to establish the most productive, the most hardy, and, especially, the most drought-resistant grain sorghums in the semiarid regions of the West and in dry areas where other crops commonly fail because of drought.</p> <p><i>Results.</i>—Early strains of milo and kafir have been produced and are being matured at higher altitudes and latitudes than has been previously possible. Dwarf strains of milo with erect heads have been obtained by selection and are now harvested with the grain header, thus doing away with slow heading, and similar strains of kafir are under process of selection. A new group of grain sorghums, the Kowliangs of Manchuria and North China, has been adapted by selection for use as extra-early and drought-resistant crops.</p>	<p>GRAIN INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(3) Oat investigations..... \$4,800.00</p> <p>(4) Barley investigations..... 2,099.00</p> <p>(5) Grain sorghum investigations... 2,900.00</p>	<p>GRAIN INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(3) Oat investigations..... \$3,300.00</p> <p>(4) Barley investigations..... 2,100.00</p> <p>(5) Grain sorghum investigations... 2,900.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.
(6) Rice investigations..... \$3,838.28 This work has for its objects the securing of data on the comparative yielding qualities of rices grown under the methods of cultivation now practiced within the rice belt; to devise methods of cultivation and irrigation that will increase the milling yields of rices; to determine the effect of environment on the composition of Carolina Gold, Honduras, and Japan rices; to select and breed varieties resistant to blast; to extend the rice area by developing varieties that can be grown without irrigation; and to determine the possibilities of rice production in California. The introduction of better yielding varieties and the improvement of cultural methods, as well as the control of diseases, are further objects of this work. <i>Results.</i> —In South Carolina, selections were made from desirable rices showing resistance to blast, and more than 100 crosses were made from these varieties with Carolina Gold and Carolina White to secure strains of the last-named varieties which would resist the disease and at the same time preserve the shape and milling qualities of rices which have always had commercial value on the South Atlantic coast. Valuable facts concerning the life history of the fungus producing the blats have been collected and extended observations on the blooming of rice, so necessary in plant breeding, have also been made. In Louisiana, on a farm at Crowley cooperatively managed with the Louisiana Agricultural Experiment Station, and also in Texas and Arkansas, through cooperative experiments, the work of the past season has furnished important results on the yielding power of 300 varieties of rices. Valuable data on fertilizers for rice have also been collected. In California the results of a year's work show that rice, with proper irrigation, may be matured with heavy yields as early as August without rain. The work also indicates that flinty grains may be secured by proper methods of cultivation and irrigation.	(6) Rice investigations..... \$6,000.00	(6) Rice investigations..... \$6,000.00
(7) Cereal disease investigations..... 2,664.19 This work includes the study of the life history of the rusts, smuts, scab, and miscellaneous diseases of grain, and the working out of methods of controlling or preventing them. It is also the aim to obtain all knowledge possible concerning the conditions favorable or unfavorable to the diseases, and all possible information which will reduce or eliminate losses from disease. The breeding of disease-resistant cereals in the various localities where diseases are prevalent or likely to occur is also a feature of the work. <i>Results.</i> —Some of the principles of resistance of cereals to various diseases have been discovered. Rust resistant varieties of wheats have been secured by crossing with the valuable hard spring wheats, and a foundation has been laid for the securing of rust resistant wheats of good yielding quality which will be valuable for milling purposes. Practical methods have been devised to prevent all the known smuts of small grains and the grain smut of sorghums. It is estimated that these smuts cause an annual loss of \$18,000,000 to \$20,000,000, and such a loss can now be largely averted. The practicability of machines for treating seed is being studied. Such machinery will reduce the labor and cost of seed treatment to a minimum and will be of great aid in the ultimate eradication of smuts and the consequent increase in the profits of farmers.	(7) Cereal disease investigations.... 4,000.00	(7) Cereal disease investigations.... 4,000.00
(8) Grain experiments in the Texas Panhandle..... 4,097.32 This work consists chiefly of an experimental farm at Amarillo, Tex., the object of which is to determine the possibilities of the Panhandle region of Texas for grain cultivation and allied farming pursuits. The results, however, will be applicable to a considerably larger area. Although chief attention is given to grains, work with other field crops is being carried on in cooperation with other offices of the Bureau of Plant Industry. <i>Results.</i> —It has been shown that certain varieties of cereals can be successfully grown in this region, such as Black Winter emmer, Galgalos, and Fretes wheat, and some varieties of grain sorghums and kafir corns. The bureau has at its disposal in this high semiarid district 120 acres of land, with the necessary buildings, donated by the business men of that section. The country is now largely devoted to grazing, but largely as a result of these experiments winter wheat is now grown to a considerable extent, and the hard winter wheat production of the Texas Panhandle now compares favorably with that of Kansas west of the Ninety-ninth meridian. There is already much evidence of the good effect of this work upon general agriculture in the Texas Panhandle.	(8) Grain experiments in the Texas Panhandle..... 3,675.00	(8) Grain experiments in the Texas Panhandle..... 3,675.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.	GRAIN INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(9) Dry land grain investigations..... \$11,613.21	(9) Dry land grain investigations... \$14,800.00	(9) Dry land grain investigations... \$14,800.00
<p>This work is conducted in the Great Plains and intermountain districts of the West, on the dry land stations operated by this and other offices of the bureau at Amarillo, and Dalhart, Tex., Akron, Colo., Bellefourche, S. Dak., Judith Basin (Philbrook), Mont., Dickinson and Williston, N. Dak., and also at Highmore, S. Dak., Nephi, Utah, and Moro, Oreg. The experiments at these points include variety testing; time, rate, and manner of seeding; selection and breeding for more drought resistant and hardy types of cereals; and the distribution of improved varieties among farmers.</p> <p><i>Results.</i>—The experimental work thus far has emphasized the desirability of growing winter grains on the dry lands. It has been found that wherever winter varieties can be grown they outyield spring varieties from 20 to 50 per cent. Hardier and improved strains of winter grains have been developed and are being increased for distribution. As a result of these experiments, the winter grain area is being rapidly extended. Experiments with winter wheats at Williston, N. Dak., this past year indicate that the hardier varieties will survive the winters in that section. Of the spring varieties, the durumms continue to give the best results. In some localities prosos and other millets promise to become important crops, some varieties yielding between 30 and 40 bushels of grain to the acre.</p> <p>A new series of experiments with potatoes indicates that they are likely to become a profitable crop on the dry lands in a rotation system with small grains. In the older wheat growing sections, where farmers have been growing a mixture of many varieties, an effort is being made to eliminate the inferior types and to encourage the growing of pure strains of those varieties which have proved best suited to the dry land areas of the country. Superior types in both yielding and milling qualities have already been developed and are now being placed in the hands of the farmers.</p> <p>A new station has been established this year at Moro, Oreg. Experiments are being started at this place for the purpose of devising a general farm management scheme that will involve the growing of cultivated crops, especially legumes, in connection with wheat. The results secured will be applicable to a large area in northeastern Oregon, eastern Washington, and northern Idaho, where the continuous cultivation of wheat has caused the soil to deteriorate, with a consequent decrease in yield and an increase in the cost of production.</p>		
(10) Tests of crop rotation in cereal culture..... 1,716.76	(10) Tests of crop rotation in cereal culture..... 1,510.00	(10) Tests of crop rotation in cereal culture..... 1,510.00
<p>This work is largely incidental to the other projects, and consists of experiments with plats of various leguminous crops in alternation with cereals, to determine the effect of the legumes on cereal production and on the soil.</p> <p><i>Results.</i>—The results obtained under this project are largely included in the statements of results under some of the other projects. Good results have been obtained, especially in California, showing the necessity for a thorough rotation of cereals with legumes to give better wheat yields and to help rid the fields of weeds.</p>		
(11) Study of the effect of environment on the composition of grains..... 2,584.00		
<p>The objects of this work, which has been conducted in cooperation with the Bureau of Chemistry, are to determine the effects of soil and climate, fertilizers, etc., on cereal composition, and also the causes of deterioration in the quality of wheat grown in certain seasons or localities. The work also includes experiments in different methods of cultivation and in the application of different amounts of irrigation water, as well as chemical analyses of the grain obtained from these tests.</p> <p><i>Results.</i>—It has been found that an oversupply of water causes the production of "white grains" in durum wheat and of "yellow berry" in winter wheats. Too much water should not be applied in irrigation. This partly explains the deterioration of wheat in California. Some results showing striking effects of changes of soil and climate on the chemical composition of wheat kernels have also been obtained.</p> <p>These investigations are now being continued by the Bureau of Chemistry, under a cooperative arrangement between that bureau and the Bureau of Plant Industry.</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.	GRAIN INVESTIGATIONS—Continued. PROJECTS—continued.
	(11) Introduction of emmer and proso..... \$1,300.00 The objects of these experiments are to introduce emmer as a hardy crop in dry districts for use as stock food to take the place of oats and barley, so far as possible; and to establish proso as a more drought resistant millet which will furnish both hay and grain for stock food. The work has special reference to the securing of new and improved crops for the arid and semiarid regions. <i>Results.</i> —Largely through the work of this department, emmer has now become quite an important crop in the dry districts, chiefly because of its drought resistant qualities. Further work is being conducted to determine the best varieties, particularly good results having followed the introduction of the Black Winter variety, which undoubtedly is now one of the most important crops for stock food that can be grown on dry lands. Several varieties of proso or Russian millet were introduced into this country by the Department of Agriculture nine years ago. After a determination of the adaptation of these millets to the Great Plains area, recently further experiments have been begun to ascertain the comparative value of different sorts. This work has already resulted in the selection of the Black Voronezh variety as the most drought resistant and otherwise best adapted proso. Pure types of the different varieties are now being developed.	(11) Introduction of emmer and proso..... \$2,000.00
CORN INVESTIGATIONS. (Charles P. Hartley, physiologist in charge.)	CORN INVESTIGATIONS. (Charles P. Hartley, physiologist in charge.)	CORN INVESTIGATIONS. (Charles P. Hartley, physiologist in charge.)
Salaries, statutory..... \$900.00 Salaries, lump fund..... 7,140.00 Miscellaneous expenses and supplies..... 2,540.00 Traveling and field expenses..... 3,850.73 Total..... 14,430.73	Salaries, statutory..... \$1,840.00 Salaries, lump fund..... 7,140.00 Miscellaneous expenses and supplies..... 1,970.00 Traveling and field expenses..... 4,150.00 Total..... 15,100.00	Salaries, statutory..... \$2,680.00 Salaries, lump fund..... 7,900.00 Miscellaneous expenses and supplies..... 900.00 Traveling and field expenses..... 3,550.00 Total..... 15,030.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Office and laboratory work..... 2,074.82 This project covers expenses incident to the office and laboratory in Washington, D. C., such as equipment and supplies for correspondence, publications, experimental records, laboratory experiments, and the care and proper preservation of seed corn, assembled at Washington and there classified during the winter months for planting experiments throughout the country. <i>Results.</i> —This equipment partially assists in meeting the demands made by correspondence and otherwise for observation and proof of results, illustrations of experiments, specimens of different kinds and strains of corn that have proved most profitable in various localities, etc. The results under this project are also reflected in the progress noted under all of the other projects, described in the following paragraphs.	(1) Office and laboratory work..... 2,105.20	(1) Office and laboratory work..... 2,103.80
(2) Development of higher-yielding strains of corn..... 6,865.91 This work consists of the breeding and selection of strains of corn by the best-known practical methods and the adaptation of these strains to localities much in need of good varieties of corn. The strains are being improved especially in productiveness and uniformity. The object of the work is to place in the hands of corn producers strains of corn that can be grown with greater profit than those now used, and to encourage the development of improved strains of corn on the farm. <i>Results.</i> —The selection and breeding of strains of corn is now in progress in 14 States. During the past year these strains have shown their superiority in yield and quality. The demonstration and breeding work in	(2) Development of higher-yielding strains of corn..... 5,630.00	(2) Development of higher-yielding strains of corn..... 5,600.40

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
CORN INVESTIGATIONS—Continued.	CORN INVESTIGATIONS—Continued.	CORN INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>these localities has interested growers in corn improvement and has raised the average production of corn per acre 10 and 15 bushels throughout the localities in which the work is conducted. As the result of breeding for higher yielding power, several of the strains have made an average annual increase of 6 bushels per acre for periods of five years, so that they are now producing on the same soil and without fertilizers or extra cultivation 30 bushels more per acre than they produced when the work was begun. At Marshall, Tex., strains being bred by the department outyielded other strains grown in the neighborhood by 5 to 10 bushels per acre. One of the strains of corn—selection 136—being bred at Waco, Tex., has been distributed to growers in many parts of the State, and has in every instance proved to be one of the highest-yielding strains in the locality. At points in Maryland, Virginia, Wisconsin, and Tennessee, where work has been in progress for four years or more, the strains of corn being bred by the department are regarded by the farmers as the best varieties that have ever been introduced into their sections.</p> <p>Seed of these improved strains of corn has been distributed by the department, and has also been sold by the farmers cooperating in the breeding work. In this manner improved seed has been widely disseminated, with resulting benefit to the corn growers of the respective localities, as is shown by the many favorable letters and reports that have been received by the department and placed on file. An awakening of interest in corn breeding and a keener appreciation of the value of the department's work to the farmer have resulted from the cooperative work with farmers. Many sections where a few years ago corn breeding was unknown to-day have their local corn growers' associations made up of enthusiastic corn breeders.</p>		
<p>(3) Investigations of methods of corn culture..... \$1,780.00</p> <p>The immense waste of land and labor through poor corn yields necessitates accurate experiments in many localities to determine the causes and ways of overcoming them. In many localities demonstrations of the possibilities of larger yields through the application of crop rotation, cover crops, and good culture will accomplish desired results, but in some cases accurate experiments that the farmer can not undertake must be conducted before high-yielding crops can be secured. To meet this need work on this project is being conducted.</p> <p><i>Results.</i>—More effective corn implements for preparing the land, planting, cultivating, and harvesting have been introduced into different localities, to the very great advantage of the farmers, who were not in position to know of such implements and their value. Cover crops and methods of rotation for better corn yields, better methods of planting, cultivating, and harvesting have been made the subject of demonstration among corn growers. The different principles of the Williamson method of corn culture have been separately and collectively tested, and modifications have been made which have resulted in increased yields.</p>	<p>(3) Investigations of methods of corn culture..... \$3,064.80</p>	<p>(3) Investigations of methods of corn culture..... \$3,045.20</p>
<p>(4) Demonstrations of seed-corn selection, etc..... 1,000.00</p> <p>This project consists of tests and demonstrations of the best and most profitable methods of seed-corn selection, drying, and preservation. The best time to select seed corn and the best practicable means of preserving it must be determined for different sections. In some sections hard fall freezes occurring before seed corn is naturally dry are injurious, and in other sections warm, humid winters or insect depredations are likewise. In order to adapt strains to different localities, means of well preserving the seed must be worked out, so that home-grown seed can each year be planted.</p> <p><i>Results.</i>—Practical and economical means of overcoming various combinations of influences injurious to seed corn have been worked out and are being tested. Experiments conducted by the department have proved that carefully dried and well-preserved seed will in some seasons yield from 7 to 18 bushels more per acre than the same seed left to endure corn-crib conditions. It has also been proved that in some cases by poor preservation the yielding power of seed is reduced without reducing the germinating power. It may germinate and give a perfect stand of stalks but yield considerably less than it would have yielded if well preserved.</p> <p>Experiments indicate that considerable loss sustained by damage to corn from weevils and moths could be avoided by an earlier harvesting of the crop than is commonly practiced, in sections where these insects are most prevalent, and by storing in buildings better adapted to fumigation purposes than those commonly used. Carbon bisulphide has thus far been found to be the most satisfactory agent for use in fumigation.</p>	<p>(4) Demonstrations of seed-corn selection, etc..... 1,000.00</p>	<p>(4) Demonstrations of seed-corn selection, etc..... 1,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
CORN INVESTIGATIONS—Continued.		
PROJECTS—continued.		
(5) Investigations of the effects of heredity and environment on corn..... \$910.00	(5) Investigations of the effects of heredity and environment on corn..... \$1,280.00	(5) Investigations of the effects of heredity and environment on corn..... \$1,280.60
<p>This work has for its objects the determination of the relative merits of rich and poor land for seed-corn production, and includes tests of the effects of pollen from barren stalks and the notation of the effects of environment on the strain. Methods of corn breeding can not be perfected until many problems of heredity and environment are accurately solved, and experiments intended to solve some of these problems have been undertaken.</p> <p><i>Results.</i>—It has been shown that the tendency to produce suckers is hereditary and can be controlled by proper methods of seed selection; also that the pollen produced by a sucker is identical with the pollen of the main stalk to which the sucker is attached. Experiments further show that the various ears of a corn plant similarly pollinated are of equal value for seed. It has also been demonstrated that high yielding power, stalk characters, and ear characters are hereditary. The interbreeding of related corn plants has in some cases given greatly increased yields. It is highly desirable to ascertain the causes, so that high-yielding ears can be constantly produced in large numbers.</p>		
(6) Sweet-corn investigations..... 1,800.00	(6) Sweet-corn investigations..... 2,020.00	(6) Sweet-corn investigations..... 2,000.00
<p>The object of this work is to bring about the increased production and use of improved varieties of sweet corn for both canning and table purposes. Green corn is not used on our tables to as great an extent as it should be used, largely because the good qualities of our best sweet corns have not been brought to the attention of housekeepers in many sections of the country, and because good strains have not been adapted to certain local conditions. Many forego the use of sweet corn because they erroneously believe it impossible to grow it successfully.</p> <p><i>Results.</i>—It has been demonstrated that by the isolation of the seed plats from all other corn, careful attention to seed-corn selection, and proper drying and preservation of the seed, canners and farmers can produce their own supply of sweet-corn seed and make unnecessary the purchase of large supplies of seed every year.</p> <p>It has also been found that no one section of the country is especially adapted for the production of sweet-corn seed, a claim that has been so frequently made that it was desirable to have the matter thoroughly investigated. The experimental work along this line has shown that in many sections in which sweet corn grows to advantage seed of good quality can be produced.</p> <p>Cooperative work conducted with a number of corn-canning factories has convinced all concerned that better and larger crops can be obtained by planting locally grown seed selected to suit conditions and well preserved, than by purchasing seed each year. The quite common practice of planting sweet corn very thickly to insure a stand can often be avoided and better crops can be produced by planting well-preserved seed.</p> <p>In the Southern States it has been found that the late-maturing varieties are most suitable for table purposes, producing more abundantly and remaining in good table condition for a greater period than other varieties.</p>		
PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS.		
(W. W. Garner, physiologist in charge.)		
Salaries, statutory..... \$400.00	Salaries, statutory..... \$400.00	Salaries, statutory..... \$1,540.00
Salaries, lump-fund..... 6,961.25	Salaries, lump-fund..... 10,510.00	Salaries, lump-fund..... 9,270.00
Miscellaneous expenses and supplies..... 3,600.00	Miscellaneous expenses and supplies..... 3,950.00	Miscellaneous expenses and supplies..... 3,950.00
Traveling and field expenses..... 1,634.75	Traveling and field expenses..... 1,750.00	Traveling and field expenses..... 1,850.00
Total..... 12,596.00	Total..... 16,610.00	Total..... 16,610.00
PROJECTS.		
(1) General supervisory and office work..... 1,600.25	(1) General supervisory and office work..... 2,855.20	(1) General supervisory and office work..... 2,510.00
<p>This project includes the planning and direction of the work both in the laboratory at Washington and in the field, the conduct of correspondence, and other details connected with the work.</p> <p><i>Results.</i>—The results under this project are reflected in the progress noted under all the other projects, described in the following paragraphs:</p>		
(2) Plant nutrition investigations..... 4,235.25	(2) Plant nutrition investigations.. 7,350.00	(2) Plant nutrition investigations.. 7,350.00
<p>This work, formerly conducted under the heading of "Chemico-Physiological Tobacco Investigations," has been modified and broadened and now covers problems in plant nutrition of a somewhat more general nature. The object of the work as now organized is to determine</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued.	PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued.	PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>the most favorable ratios between the various elements of plant food for specific crops, not only with reference to gross crop yields, but also with respect to the production of the most valuable constituents of these crops. These studies include experiments for determining the most favorable ratios between the elements of plant food for increasing the yields of such crops as tobacco and cotton, for determining the relation of the different elements of plant food to the oil content of cotton seed, soy beans, etc., for securing greater resistance to parasitic diseases by improving the nutrition of the plant, and to secure information as to the best sources or forms of the various elements of plant food for special crops or for special purposes.</p> <p><i>Results.</i>—As a result of the studies on tobacco, a process for the improvement of the burning quality of the cured leaf has been devised and a new method for the determination of nicotine has been developed. The important changes in composition effected in the curing and fermentation processes have been determined, and as a result a practical method for controlling diseases in the tobacco-curing barn by the use of artificial heat has been developed. Formulas for petunes to be used in the fermentation have been devised for the improvement of the flavor and aroma.</p> <p>Valuable data have also been obtained as to the best formulas for fertilizing cotton to secure increased crop yields and increased production of oil in the seed.</p>		
(3) Breeding rust-resistant asparagus..... \$1,831.16	(3) Breeding rust-resistant asparagus..... \$3,804.80	(3) Breeding rust-resistant asparagus..... \$3,950.00
<p>This work is conducted in cooperation with the Massachusetts Agricultural Experiment Station, having for its object the securing of commercial strains of asparagus which will be resistant or immune to the rust disease, which is threatening the industry in a number of sections.</p> <p><i>Results.</i>—A large number of varieties and strains and numerous selections from resistant plants are growing in an experimental field at Concord, Mass. Pedigreed seed has been secured from the most resistant plants in this and in neighboring fields. From preliminary trials it is known that these hand-pollinated seed from select parents are far better than any varieties at present under trial, none of which have proved sufficiently immune. Hybrids of resistant uncultivated species and the cultivated varieties have been made and are being tested experimentally. The new methods of pedigree breeding promise the best results.</p>		
(4) Breeding of vetches and other cover crops..... 1,941.67	(4) Breeding of vetches and other cover crops..... 1,000.00	(4) Breeding of vetches and other cover crops..... 1,000.00
<p>The objects of this work, which is conducted largely in Connecticut and Massachusetts, are to breed and introduce acclimated strains of hairy vetch and other plants for growing on lands needing a winter cover to conserve soil fertility and to add to the humus content and nitrogen supply, thus reducing the cost of commercial fertilizers and manure. The work has special reference to the acclimatization and improvement of suitable cover crops for tobacco fields.</p> <p><i>Results.</i>—Acclimated strains of hairy vetch have been produced in the Connecticut Valley. It has been demonstrated that the tobacco grown on these soils, where this improved vetch has been grown, produces a larger yield of better quality than where the vetch was not grown. Hairy vetch adds from \$12 to \$25 worth of nitrogen per acre, in addition to improving the character of the soil, thus saving this amount on commercial fertilizers. Improved machinery and methods of seed production are being developed so that growers can produce their own seed, and at a reduced cost. Crimson clover and winter wheat are also being acclimated and promise well.</p>		
(5) Cooperative breeding demonstrations in Georgia..... 2,005.00	(5) Cooperative breeding demonstrations in Georgia..... 1,600.00	(5) Cooperative breeding demonstrations in Georgia..... 1,800.00
<p>The object of this work is to demonstrate the practical value of breeding and seed selection in the improvement of crops. The method is to encourage growers in making actual field tests in their own fields by giving them advice and assistance in the arrangement of breeding plats, in making intelligent selections, and in the separation and sowing of seed. A distinctive feature of the work is its educational aspect, and breeding in itself is limited to the requirements for proper demonstration of the practical benefits to be derived from the application of its principles.</p> <p><i>Results.</i>—The work was begun with cotton, and all the standard varieties were tested in order to secure, for further development, those best adapted to northern Georgia. The superiority of the varieties selected over the ordinary unimproved cotton of the region has been demonstrated, and a number of the farmers are now growing these and carrying on the work of selection for their further improvement with the assistance of this bureau. The success of the work has led many of the best farmers to extend the practice of making care-</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>ful field selections of seed to their crops of corn, cotton, oats, wheat, etc. One of the most intelligent farmers of northern Georgia has provided himself with equipment for ginning selections and for separating the seed for many of the growers of the region. As a result of the interest aroused in this work, a number of county fairs are being held throughout the section, and these afford an invaluable means of acquainting the farmers generally with the results of the cooperative work with those who are improving their crops by intelligent breeding and seed selection, combined with good systems of soil management.</p> <p>(6) Improvement of potatoes..... \$982.67</p> <p>This work, which was conducted chiefly in Illinois and Connecticut, had for its object the production of high-yielding and high starch-producing new varieties of potatoes from seed and through tuber selections.</p> <p><i>Results.</i>—A large number of varieties propagated from seed which showed desirable characteristics were tested for their comparative commercial value, and several promising varieties were secured.</p> <p>This project has been discontinued, as the work of potato testing and improvement is being continued by other offices of the Bureau of Plant Industry.</p> <p>TOBACCO INVESTIGATIONS. (W. W. Garner, physiologist in charge.)</p> <p>Salaries, statutory..... \$2,020.00 Salaries, lump fund..... 21,681.83 Miscellaneous expenses and supplies..... 3,300.00 Traveling and field expenses..... 6,155.91</p> <p>Total..... 33,157.74</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... 4,738.86</p> <p>This project includes the planning and direction of the field work, the conduct of correspondence, and other details in connection with the field investigations.</p> <p><i>Results.</i>—The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs.</p> <p>(2) Connecticut Valley tobacco investigations..... 5,126.01</p> <p>The work in Connecticut consists of the improvement of the native tobaccos by hybridization and selection; the improvement of shade tobaccos by selection, breeding, and fertilization; and the improvement of methods of curing and packing the crop. Considerable attention is also being given to tobacco diseases, both in the seed bed and in the field. Especial attention is being devoted to the root rot, which has caused very great damage for the past two years, and attempts are being made to secure strains of tobacco resistant to this disease and to study the effects of crop rotation upon its prevalence. There is pressing need now to devise methods of restoring and maintaining former satisfactory yields in the broadleaf district and of controlling the increasing prevalence of rust.</p> <p><i>Results.</i>—A new variety of cigar tobacco, adapted to northern districts, known as the Halladay Habana, has been developed and given a commercial test, with highly satisfactory results. This tobacco, resulting from a cross of Habana seed with Sumatra, is attracting much interest among growers and will be of special value for wrapper and binder purposes because of the greatly increased number of leaves of large size and excellent shape, averaging in this respect fully one-third more productive than the present Habana seed leaf.</p> <p>The efficiency of steam sterilization of seed beds for the control of fungous diseases, especially root rot, has been fully demonstrated. A simple and comparatively inexpensive method has been devised and tested for the use of artificial heat in the curing barn in controlling pole sweat and in securing better colors in the curing process.</p> <p>(3) New York tobacco investigations..... 1,880.00</p> <p>This work is conducted in the Onondaga district, which produces primarily a cigar filler tobacco. This section formerly grew wrapper leaf, but trade requirements having changed, the product is classed as filler. This change of conditions has brought about confusion in types of leaf being grown and consequent deterioration in the product as a whole. Moreover, the growers have relied in the past entirely on commercial stable manure for growing the crop, but this supply having recently failed it has become necessary to resort to commercial fertilizers. This has led to a marked demand</p>	PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>(6) Discontinued.</p> <p>TOBACCO INVESTIGATIONS. (W. W. Garner, physiologist in charge.)</p> <p>Salaries, statutory..... \$2,480.00 Salaries, lump fund..... 17,650.00 Miscellaneous expenses and supplies..... 2,030.00 Traveling and field expenses..... 3,500.00</p> <p>Total..... 25,660.00</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... 3,760.00</p> <p>(2) Connecticut Valley tobacco investigations..... 2,300.00</p> <p>(3) New York tobacco investigations..... 1,800.00</p>	PLANT NUTRITION AND GENERAL PLANT-BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>TOBACCO INVESTIGATIONS. (W. W. Garner, physiologist in charge.)</p> <p>Salaries, statutory..... \$3,080.00 Salaries, lump fund..... 16,250.00 Miscellaneous expenses and supplies..... 2,530.00 Traveling and field expenses..... 3,550.00</p> <p>Total..... 25,410.00</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... 3,210.00</p> <p>(2) Connecticut Valley tobacco investigations..... 2,200.00</p> <p>(3) New York Tobacco investigations..... 1,950.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p>TOBACCO INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>for assistance in determining the proper usage of these fertilizers.</p> <p><i>Results.</i>—Much has been accomplished in determining the varieties best adapted to New York conditions, and a strain of Habana seed leaf has been developed, which is believed to be a distinct improvement over the varieties now generally grown. The greater uniformity of the product resulting from the weeding out of the less desirable types will materially enhance both the yield and quality of the crop. A great deal of valuable data has been secured from cooperative work with growers as to the best use of commercial fertilizers as a partial substitute for barnyard manure. The bulk method of fermentation has been successfully demonstrated in New York.</p> <p>(4) Ohio tobacco investigations..... \$88.87</p> <p>This work is conducted in cooperation with the Ohio Agricultural Experiment Station and has for its object the improvement of the native tobaccos by breeding and selection and by improved methods of growing, curing, and fermenting the crop. The trade complains that the present types of Zimmer and Seedleaf are much inferior to the product formerly produced, and an effort is being made to restore these types by breeding and selection to their former excellence. Information as to the best methods of fertilization, especially regarding the use of potash salts and concerning improved methods of curing and fermentation, is now very much needed.</p> <p><i>Results.</i>—Good progress has been made in the breeding work and a number of new types, hybrids, and improved strains of tobacco have been tested, some of which give promise of being of special value for filler purposes because of their increased productiveness and excellence in flavor and aroma. The most promising strains have been tried out during the past season and the final tests of quality are being made. The bulk method of fermentation has given good results when properly carried out, but packers need further instruction in the process.</p> <p>(5) Maryland tobacco investigations..... 1,950.00</p> <p>This work is conducted in cooperation with the Maryland Agricultural Experiment Station. Work along the lines of improving the types of tobacco grown by breeding and selection has been continued, and experiments with fertilizers and the rotation of crops have been added with a view to improving farm practice as a whole, including the best use of fertilizers, the best strains of seed, the systematic use of soil-improving leguminous and forage crops, and such diversification as will make success less dependent upon the fortunes of tobacco as the sole money crop.</p> <p><i>Results.</i>—Although this latter feature of the work has been included less than two years, it has already attracted wide attention throughout the tobacco producing sections of southern Maryland, indicating clearly that it is in the general style of farming in vogue rather than in the tobacco itself that the real weakness of the situation lies.</p> <p>In the fertilizer experiments information has been secured of a nature to show that when intelligently used and adequately supplemented by humus crops, fertilizers can be used to much greater advantage than at present, particularly in connection with the tobacco crop itself. Grass growing for hay has been much of a failure in the tobacco districts of Maryland, and there have been each year considerable quantities shipped in from the outside. More than 3 tons of first-class hay per acre were produced this year in connection with the rotation experiments, under circumstances that give every reason for believing that only the right adaptation of method is needed to produce as good hay crops in Maryland as anywhere else.</p> <p>These experiments, as a whole, are influential demonstrations of the possibilities for improvement in returns from the use of the best all-round methods. The Maryland Experiment Station has recently added to its equipment for the work a fine new tobacco-curing barn, erected in accordance with plans submitted by this bureau. The crops included in the fertilizer and rotation work are tobacco, potatoes, wheat, grass for hay, corn, cowpeas, and crimson clover.</p> <p>(6) Virginia tobacco investigations..... 5,856.50</p> <p>This work is carried on in cooperation with the Virginia Agricultural Experiment Station, which has from the state legislature a special appropriation of \$5,000 per year for defraying its share of the expense. The work is conducted on rather broad lines and is handled from the standpoint of improving farm practice as a whole, with tobacco the leading but not the exclusive money crop. There are three main features of the work, viz: First, the plat test experiments with fertilizers; second, the crop rotation demonstration plats, possessing some important experimental features; and third, the tobacco breeding work, which has for its object the securing of the best strains of seed. The object-lesson phase of the work is</p>	<p>TOBACCO INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(4) Ohio tobacco investigations.... \$200.00</p> <p>(5) Maryland tobacco investigations..... 2,000.00</p> <p>(6) Virginia tobacco investigations. 5,000.00</p>	<p>TOBACCO INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(4) Ohio tobacco investigations.... \$750.00</p> <p>(5) Maryland tobacco investigations..... 2,000.00</p> <p>(6) Virginia tobacco investigations. 5,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued.	TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued.	TOBACCO INVESTIGATIONS—Continued. PROJECTS—continued.
emphasized. These investigations and experiments are being conducted in the bright or flue-cured tobacco sections of Virginia, as well as in the dark-fired section and the sun-cured section, with sufficient modification to suit each locality. <i>Results.</i> —This work has aroused unusual public interest and there is a marked demand for its extension into new localities. Although the work has not been under way long enough to carry any of the plats through a full rotation course, the results already obtained demonstrate most convincingly that the use of much more intensive methods is desirable. Crops of tobacco of from 1,400 to 1,600 pounds per acre instead of the general average of 800 pounds; wheat of from 25 to 30 bushels per acre instead of from 10 to 15 bushels; and, most important of all, surprising grass crops yielding from 2 to 3 tons, and in one case 5 to 6 tons per acre, indicate some of the possibilities of crop yields in Virginia under proper methods. Cowpeas and crimson clover especially are made full use of in these demonstrations. Field meetings have been held at several points where the work is conducted, which were unusually well attended by the farmers and aroused great interest. Many farmers all over the tobacco-growing sections of the State are putting into operation the methods demonstrated by the experiments to be the best.		
(7) North Carolina tobacco investigations \$1,300.00 This work is conducted in cooperation with the North Carolina Department of Agriculture, having been inaugurated during the past year. A location has been selected for the work in Pitt County, near Greenville, in the "new belt" of the bright tobacco section of the State, and it is intended to develop the work along the same lines as followed in Virginia, described in the preceding paragraph. <i>Results.</i> —A preliminary set of fertilizer experiments and variety tests have been conducted during the present season, but the results thereof are not yet available. Good progress is being made in the development of the work in North Carolina.	(7) North Carolina tobacco investigations..... \$2,600.00	(7) North Carolina tobacco investigations..... \$2,600.00
(8) Kentucky tobacco investigations..... 2,800.00 This work is carried on in cooperation with the Kentucky Agricultural Experiment Station. The problems consist in improvement of the tobacco itself in yield and quality by seed selection and breeding, together with the improvement of general farm methods by the more intelligent use of fertilizers and the fundamental building up of the soil by the systematic rotation of crops, including the grasses and legumes. Experiments are located in the Burley tobacco section at the experiment station in Lexington; in the "dark-fired" section in Christian County; and in Breckenridge County in the Green River tobacco district. <i>Results.</i> —A large number of selections and crosses of many of the types of tobacco grown in Kentucky have been made and tested out by the row-to-row method, and some excellent strains of seed secured. The fertilizer tests conducted in Christian County indicate in a most striking way the fundamental need of the soil of that locality for applications of phosphate fertilizers, if the best crop results are to be obtained. The crop rotation feature has been so recently introduced into the Kentucky work that no definite results can yet be reported.	(8) Kentucky tobacco investigations..... 2,100.00	(8) Kentucky tobacco investigations..... 2 100.00
(9) Texas tobacco investigations..... 4,891.67 The work in Texas, inaugurated by the Bureau of Soils some years ago, had for its object the introduction of the growing of cigar filler tobacco from Cuban seed. It has been shown that a filler of excellent general quality can be produced in several counties of east Texas, but further improvement in evenness of quality and particularly in increase of yield is required. This product must then be brought to the attention of the trade. An annual appropriation of \$1,000 from the State is now available for the support of this work, which will make it possible to carry out decisive experiments for determining and demonstrating the best use of fertilizers and methods of cultivating, curing, and handling cigar filler tobacco as a money crop in connection with improved methods of farm practice. <i>Results.</i> —During the past year the work in Texas has been mainly of an advisory nature, and no attempt has been made to encourage the extension of the industry. Instruction has been given growers in the best available methods of growing, curing, and handling tobacco, and the improved methods of cultivation and fertilization recommended have served greatly to advance the general farm practice of this section. Although the introduction of the shade tobacco industry into Texas has at no time been advocated, instruction has been given those who have undertaken this proposition. Growers have also been given advice in breeding and seed selection, and strains of tobacco of increased productiveness have been secured.	(9) Texas tobacco investigations... 3,075.00	(9) Texas tobacco investigations... 1,900.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
TOBACCO INVESTIGATIONS—Continued.		
PROJECTS—continued.		
(10) Alabama tobacco investigations..... \$2,322.58 The work in Alabama is also a continuation of the investigations inaugurated several years ago by the Bureau of Soils. It has been shown that a good grade of cigar filler tobacco can be grown from Cuban seed in the southern portion of the State, but as this is new tobacco territory the growers require assistance and instruction in methods of growing and handling the crop, and the product must also be brought to the attention of the trade. A few farmers have undertaken the growing of wrapper tobacco under artificial shade, but this feature of the industry can not be recommended under present conditions. The situation as a whole is similar to that existing in Texas. <i>Results.</i> —As in Texas, the work in Alabama has been mostly of an advisory nature, and has been conducted in cooperation with the state department of agriculture and industries. Limited quantities of selected seed for filler purposes have been furnished growers and they have been given instruction in the most approved methods of growing, curing, and handling this class of tobacco. Cooperative tests with growers for determining the best methods of fertilization have also been carried out.	(10) Alabama tobacco investigations..... \$2,825.00	(10) Alabama tobacco investigations..... \$1,700.00
(11) Florida and Georgia tobacco investigations..... 2,203.25 The work in Florida and Georgia was along similar lines to that conducted in the Connecticut Valley, previously described, including the general improvement of methods of cleaning and saving seed, the improvement of types by hybridization and selection, the testing of new cigar wrapper types, tests of fertilizers, and the control of diseases. <i>Results.</i> —Owing to the necessity of curtailing the tobacco investigations, the experimental problems were temporarily abandoned last year in Florida and Georgia, and the work was confined to cooperative work with growers in seed selection. Some valuable strains of tobacco have been obtained which will assist in bringing about a more uniform type of leaf, which is especially desirable at this time.	(11) Suspended for the present year.	(11) Florida and Georgia tobacco investigations..... 2,000.00 NOTE. —For a number of years tobacco has been the principal money crop in Gadsden and adjoining counties of Florida and Georgia, and anything that can be done to improve the present situation there will be of the greatest benefit to the farmers of this section. In view of the unsettled market conditions in the shade tobacco industry, in which a large amount of capital is invested, and because of the appearance and rapid spread of several serious diseases of tobacco, there is urgent need of work in this section designed to improve present conditions. It is proposed to resume experimental work in Florida and Georgia during the coming year.
SUGAR-BEET INVESTIGATIONS.		
(C. O. Townsend, pathologist in charge.)		
Salaries, statutory..... \$1,000.00 Salaries, lump-fund..... 14,254.50 Miscellaneous expenses and supplies..... 3,335.73 Traveling and field expenses..... 6,704.77 Total..... 25,295.00	Salaries, statutory..... \$1,080.00 Salaries, lump-fund..... 13,620.00 Miscellaneous expenses and supplies..... 3,705.00 Traveling and field expenses..... 6,975.00 Total..... 25,380.00	Salaries, statutory..... \$2,280.00 Salaries, lump-fund..... 13,720.00 Miscellaneous expenses and supplies..... 3,755.00 Traveling and field expenses..... 5,600.00 Total..... 25,355.00
PROJECTS.		
(1) Office and laboratory work..... 3,626.99 This project includes the routine laboratory work in connection with the sugar-beet and related investigations, the general office details and correspondence, and other similar features connected with the work. <i>Results.</i> —The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs.	(1) Office and laboratory work..... 3,370.00	(1) Office and laboratory work..... 3,300.00
(2) Production of single-germ sugar-beet seed..... 4,287.00 This work consists of selection and breeding experiments to eliminate multiple-germ beet seeds and to increase the number of single-germ seeds. The object is to produce beet seeds which will give but one seedling, thus to a great extent eliminating the cost of thinning and consequently the cost of producing beet sugar. The ordinary beet seed contains several germs and when planted five or six seedlings sprout, necessitating a great expense in thinning the plants. It is to obviate this necessity that this project has been undertaken. <i>Results.</i> —Strains of beets have been developed which produce from 50 to 60 per cent of single-germ seed, and the sugar content from these seeds has been greatly increased. There is every indication that we will finally secure the strain of single-germ seed desired. Each season's work shows an increased percentage of single-germ seeds. During the past year it has been definitely determined that when a plant has once acquired the single-germ tendency, it is immaterial whether the seeds used in the propagation of this plant be single or multiple germ, so far as the production of single-germ seeds is concerned. The development of the single-germ seed is now in progress at several stations, with fair prospects of ultimate success.	(2) Production of single-germ sugar-beet seed..... 3,970.18	(2) Production of single-germ sugar-beet seed..... 3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SUGAR-BEET INVESTIGATIONS—Continued.	SUGAR-BEET INVESTIGATIONS—Continued.	SUGAR-BEET INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(3) Improvement of yield and quality of sugar beets. \$2,000.00 This work includes selection experiments with large sugar beets of good quality, as well as the growing of large varieties of stock beets rich in sugar. The object is to increase the yield of sugar per acre through a combination of the large, rich sugar beet with the large, rich stock beet by means of cross-breeding. <i>Results.</i> —A stock beet containing 14 per cent sugar has been produced as a result of this work. The stock beets averaged more than three times the weight of the sugar beets in the same field. A large number of these beets have been siloed for seed production. Continued selection indicates that an increase in the size of the beet accompanied by an increased sugar content may be obtained.	(3) Improvement of yield and quality of sugar beets. \$2,000.00	(3) Improvement of yield and quality of sugar beets. \$1,500.00
(4) Extension of sugar-beet culture. 345.42 This consists of selection and breeding work to obtain beets suitable for short seasons, as well as varieties which will resist alkali and drought, thus extending the range of sugar-beet culture. The objects are to produce beets of good quality in alkaline soils, to produce a strain of beets that will thrive in semiarid regions without irrigation, and to obtain varieties maturing earlier than those now in use, thus lengthening the harvesting season. <i>Results.</i> —Beets that mature from one to two weeks earlier than the usual crop have been selected and siloed with a view to producing a strain of beets that will enable the growers to begin the harvest at least two weeks earlier than at present. This will also enable growers to do away with the necessity of pitting or otherwise holding the beets for delivery at loss in weight and extra expense in rehandling. A large number of beets have been secured which show greater resistance to alkali and drought than the general crop, and it is believed that special strains will be secured suitable for semiarid and alkaline locations. Considerable work is being done in extending the sugar-beet industry into sections of the country where this plant is not now grown commercially, and where soil and climatic conditions promise success with this crop.	(4) Extension of sugar-beet culture. 983.34	(4) Extension of sugar-beet culture. 2,240.00
(5) Improvement of methods of growing sugar beets. 2,000.00 This work includes the study of the time and method of preparing the seed bed, width of rows, subsoiling, etc. The objects are to find methods of lessening the cost of growing sugar beets, and at the same time to increase tonnage and improve the quality of the beets produced. <i>Results.</i> —It has been shown that best results are obtained when the seed bed is prepared in the fall. Continued cultivation beyond the usual time in mid-summer results in an increase of sugar per acre considerably in excess of the extra cost of cultivation. Subsoiling has in some instances given negative results. If this extra work is not necessary the grower should be saved that expense. This can be determined only by carefully planned and executed experiments. Some interesting results have been obtained with reference to width of row, time and depth of cultivation, etc. For example, when the width of row exceeds 22 inches, there is, so far as our experiments have been carried out, a loss to the grower. Furthermore, the use of the roller has been found to be very beneficial in the growing of sugar beets. Efforts are being made to establish the best possible methods of culture for the various sugar-beet sections.	(5) Improvement of methods of growing sugar beets. 2,000.00	(5) Improvement of methods of growing sugar beets. 2,000.00
(6) Study of effect of fertilizers on sugar beets. 1,200.00 This work includes experiments in the application of fertilizers and fertilizer ingredients at different times and in different quantities, noting the different soil, climatic, and cultural conditions. The object is to find which fertilizers are most valuable in increasing the quantity and improving the quality of the beets. <i>Results.</i> —It has been found that green fertilizer and stable manure are indispensable to successful sugar-beet growing. Commercial fertilizers under some conditions give good results. For example, one test made with 900 pounds of fertilizer per acre showed a clear gain of upward of \$25 per acre above all expenses, and 300 pounds per acre under same conditions produced a clear gain of only \$7 per acre. In some instances commercial fertilizers seem to be of little or no advantage.	(6) Study of effect of fertilizers on sugar beets. 1,000.00	(6) Study of effect of fertilizers on sugar beets. 1,415.00
(7) Improvement of methods of siloing sugar beets. 1,200.00 This work consists of experiments in siloing sugar beets in different ways and under different conditions, and the careful noting of results. The object is to keep the seed beets perfectly dormant during the winter without either wilting or decaying. Much trouble has been experienced by growers and factory men in siloing beets, and the difficulties met in siloing our experimental crops of selected beets have made it especially necessary to determine the best methods of siloing. <i>Results.</i> —So far the outdoor silo has been found to be distinctly preferable to siloing under a shed. The beets	(7) Improvement of methods of siloing sugar beets. 1,000.00	(7) Improvement of methods of siloing sugar beets. 900.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SUGAR-BEET INVESTIGATIONS—Continued.	SUGAR-BEET INVESTIGATIONS—Continued.	SUGAR-BEET INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>in the silo should be kept as close to the freezing point as possible without allowing the roots to become frosted. Beets should be as nearly ripe as possible before siloing. By the use of the facts learned in these experiments we have reduced the loss in silos from about 25 to about 5 per cent.</p> <p>The most satisfactory method of siloing beets which has been found is the so-called sand method, in which the roots are entirely imbedded in sand. This prevents the evaporation from the roots, keeping them in a firm, crisp condition, and also prevents the destructive action of field mice. By this method the loss has been practically nothing, while by the old method frequently from 10 to 25 per cent of the roots were destroyed by the mice.</p> <p>(8) Study and control of diseases of sugar beets..... \$3,299.97</p> <p>This work includes the study in the field and in the laboratory of the most important diseases which attack sugar beets, chief among which are those known as curly-top and leaf-spot. The objects are to determine the causes of the diseases and to devise methods of controlling them successfully.</p> <p><i>Results.</i>—It has been definitely established that the so-called curly-top disease of the sugar beet is due to an insect, <i>Eutettix tenella</i>, commonly known as the white fly. Methods for the control and prevention of this trouble are now being worked out. Related forms of this disease have been found and are now under investigation. These are undoubtedly produced by insects related to the <i>Eutettix tenella</i>. It has been found that these insects can be destroyed by the use of certain sprays, but we have not yet determined that this is the most practicable method of controlling the disease.</p> <p>It has been shown that the leaf-spot disease can be controlled on a commercial scale by spraying with Bordeaux mixture. Root-rot of the beet may be controlled by the use of air-slaked lime. A new bacterial disease of the sugar beet has been discovered during the past year and is now under investigation.</p> <p>(9) Study and control of special plant diseases..... 2,134.91</p> <p>The object of these investigations is mainly to study the diseases of plants grown in rotation with sugar plants, since it is possible for diseases to be transmitted through the soil or otherwise from one plant species to another.</p> <p><i>Results.</i>—It has been found that the fungus which produces the principal root-rot disease of the sugar beet will also attack alfalfa, one of the principal plants grown in rotation with sugar beets in the West. The same scab disease which attacks the sugar beet also attacks the white potato. Numerous other cases of this kind have been found, and undoubtedly others will be discovered as the work progresses.</p> <p>It should be mentioned in this connection that the crown gall, which has been so destructive on fruit trees, also attacks the sugar beet and a large number of plants that may be grown in connection with this crop, such as potatoes and alfalfa. Our work upon the crown-gall disease in connection with the common daisy has led to the discovery of the cause of the crown gall of peaches and apples, one of the most destructive diseases known in plant pathology.</p> <p>(10) Investigations of the beet-sugar industry..... 5,200.71</p> <p>This work includes a study of the domestic production of sugar from beets and the securing of general information regarding the development and condition of the industry in the United States.</p> <p><i>Results.</i>—A report on the Progress of the Beet Sugar Industry in the United States is issued annually from the office of the Secretary. This report is designed to give full information as to the development of the industry, which is becoming more prosperous each year.</p>	<p>(8) Study and control of diseases of sugar beets..... \$4,367.68</p> <p>(9) Study and control of special plant diseases..... 2,488.80</p> <p>(10) Investigations of the beet-sugar industry..... 4,200.00</p>	<p>(8) Study and control of diseases of sugar beets..... \$4,800.00</p> <p>(9) Study and control of special plant diseases..... 2,000.00</p> <p>(10) Investigations of the beet-sugar industry..... 4,200.00</p>
DRY LAND AGRICULTURE INVESTIGATIONS.	DRY LAND AGRICULTURE INVESTIGATIONS.	DRY LAND AGRICULTURE INVESTIGATIONS.
(E. C. Chilcott, agriculturist in charge.)	(E. C. Chilcott, agriculturist in charge.)	(E. C. Chilcott, agriculturist in charge.)
Salaries, statutory..... \$1,480.00	Salaries, statutory..... \$2,520.00	Salaries, statutory..... \$2,520.00
Salaries, lump fund..... 18,620.00	Salaries, lump fund..... 19,482.00	Salaries, lump fund..... 20,932.00
Miscellaneous expenses and supplies..... 2,914.44	Miscellaneous expenses and supplies..... 4,128.00	Miscellaneous expenses and supplies..... 2,798.00
Traveling and field expenses..... 9,951.81	Traveling and field expenses..... 8,150.00	Traveling and field expenses..... 8,000.00
Total..... 32,966.25	Total..... 34,280.00	Total..... 34,250.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p>DRY LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... \$10,723.92 This project includes the planning and direction of the field work, the conduct of correspondence, all necessary traveling expenses in supervising the work, and other details connected with the investigations. <i>Results.</i>—The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs:</p> <p>(2) Dickinson, N. Dak., dry-land project..... 1,181.00 This project is located on the Dickinson substation of the North Dakota Agricultural Experiment Station. The work here, as well as that on all of the other projects which follow, consists of experiments in cultivation methods, crop rotations, and methods of conserving moisture in the soil. The object is to improve the agricultural practices in that portion of the semiarid West known as the Great Plains area, and to place dry farming in that region on a sound basis; in other words, to bring about the successful growing of crops under semiarid conditions without unnecessary depletion of the fertility of the soil. Close cooperation with nearly all of the State experiment stations in the Great Plains area has been effected in this work. <i>Results.</i>—Three years' results have been obtained in this work, which show that much can be accomplished by a proper system of crop rotation to increase the yields of crops and at the same time to maintain the organic matter in the soil. The plowing under of green manure in the form of rye, peas, and sweet clover has given some very favorable results. Corn in rotation has also proved a good preparation for small grain. The yields of small grain following summer tillage have been good, but not sufficiently in excess of rotations to warrant the extra expense. In 1907 wheat averaged 33.17 bushels per acre on all plats, the yield ranging from 25 to 37.5 bushels per acre. Oats averaged 44.67 bushels per acre, the range in yield being from 28 to 71 bushels per acre. In 1908 wheat averaged 29.94 bushels per acre on all plats ranging from 17.67 to 38 bushels per acre; and oats averaged 53.18 bushels, with a range of 30 to 67.19 bushels per acre. The yield for 1909 are good, but figures are not yet available.</p> <p>(3) Williston, N. Dak., dry-land project..... 250.00 The work on this project is essentially similar to that on the Dickinson project, previously described. <i>Results.</i>—Work at this point was only undertaken in a small way by this office during the past year. The project is now being developed along the lines indicated in the 1910 column.</p> <p>(4) Edgeley, N. Dak., dry-land project..... 1,437.00 This project is located on the Edgeley substation of the North Dakota Agricultural Experiment Station, and the work is essentially similar to that at Dickinson, previously described. <i>Results.</i>—Excellent results have been obtained at this point, a statement of which is included under the Dickinson project. The work has been conducted during three seasons, and the results become more valuable with each year.</p> <p>(5) Bellefourche, S. Dak., dry-land project..... 5,813.13 This is an independent station, conducted on a tract of the Bellefourche Irrigation Project, placed at our disposal by the United States Reclamation Service, which has furnished the necessary permanent improvements for the work. The work at this point during the past year was essentially similar to that on the Dickinson project, previously described, with the added feature of cooperative work with the Office of Western Agricultural Extension and other offices of the Bureau of Plant Industry. <i>Results.</i>—Valuable results have been obtained at this point by a number of the offices of the bureau, similar in a general way to those obtained at Dickinson, N. Dak., previously referred to.</p> <p>(6) North Platte, Nebr., dry-land project..... 1,610.00 This project is located on the North Platte substation of the Nebraska Agricultural Experiment Station, the work being essentially similar to that on the Dickinson, N. Dak., project, previously described. <i>Results.</i>—The work of the past three seasons has yielded excellent results at this point, and the data secured have been prepared for publication as a Nebraska State bulletin. For a detailed statement of results, see the Dickinson, N. Dak., project.</p> <p>(7) Hays, Kans., dry-land project..... 1,050.00 This project is located on the Hays substation of the Kansas Agricultural Experiment Station, the work being essentially similar to that on the other projects. <i>Results.</i>—Three years' results have been obtained at this point. From the standpoint of crop yields the results have not been very successful. Hail, soil blowing, insect attacks, and drought have greatly reduced yields. Some very valuable data have been obtained, however, which are being collated for future use.</p>	<p>DRY LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... \$11,728.00</p> <p>(2) Dickinson, N. Dak., dry-land project..... 1,200.00</p> <p>(3) Williston, N. Dak., dry-land project..... 252.00 <i>NOTE.</i>—This project is conducted in close cooperation with the Office of Western Agricultural Extension, and is more fully outlined under that office (immediately following).</p> <p>(4) Edgeley, N. Dak., dry-land project..... 1,200.00</p> <p>(5) Bellefourche, S. Dak., dry-land project..... 300.00 <i>NOTE.</i>—The general management and maintenance of this project is now in the hands of the Office of Western Agricultural Extension, and will be further described under that office (immediately following).</p> <p>(6) North Platte, Nebr., dry-land project..... 1,700.00</p> <p>(7) Hays, Kans., dry-land project.. 1,200.00</p>	<p>DRY LAND AGRICULTURE INVESTIGATIONS—Continued.</p> <p>PROJECTS.</p> <p>(1) General supervisory and office work..... \$11,298.00</p> <p>(2) Dickinson, N. Dak., dry-land project..... 1,200.00</p> <p>(3) Williston, N. Dak., dry-land project..... 252.00</p> <p>(4) Edgeley, N. Dak., dry-land project..... 1,200.00</p> <p>(5) Bellefourche, S. Dak., dry-land project..... 300.00</p> <p>(6) North Platte, Nebr., dry-land project..... 1,700.00</p> <p>(7) Hays, Kans., dry-land project.. 1,500.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
DRY LAND AGRICULTURE INVESTIGATIONS—Continued.	DRY LAND AGRICULTURE INVESTIGATIONS—Continued.	DRY LAND AGRICULTURE INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(8) Garden City, Kans., dry-land project. \$884.20 This project is carried on in cooperation with the Kansas Agricultural Experiment Station, which is to furnish suitable buildings, etc., for the work. This station is essentially similar in its objects and purposes to the others previously referred to. <i>Results.</i> —The land on this project was raw prairie and had to be broken and subdued in the spring of 1907. It was laid out into plats and seeded, but the weather proved too dry to produce a crop on sod land. The results of 1908 and 1909 have been obtained under conditions of severe drought and are very significant and instructive, showing that crops can be successfully grown by proper methods of cultivation where complete failure under ordinary methods is certain.	(8) Garden City, Kans., dry-land project. \$1,200.00	(8) Garden City, Kans., dry-land project. \$1,200.00
(9) Akron, Colo., dry-land project. 4,467.00 This is an independent station of the Bureau of Plant Industry, the land and improvements having been furnished by the citizens of Akron and vicinity. Many offices of the bureau are conducting investigations at this point, the facilities being supplied by this office. The work is essentially similar to that on the other projects, previously described. <i>Results.</i> —The station is now well equipped with buildings, implements, etc., and some excellent results have been obtained of a general nature similar to those described under the Dickinson, N. Dak., project.	(9) Akron, Colo., dry-land project.. 5,500.00	(9) Akron, Colo., dry-land project.. 5,500.00
(10) Amarillo, Tex., dry-land project. 150.00 The work at this point is conducted in cooperation with the Office of Grain Investigations of this bureau, by which the greater portion of the facilities and expenses of the work during the past year were furnished. The general supervision and management of the farm are in the hands of that office. The experiments in dry-land agriculture conducted there by this office are essentially similar to those on the other projects. <i>Results.</i> —Excellent results have been obtained here during four seasons, similar in a general way to those secured at the other stations already described.	(10) Amarillo, Tex., dry-land project 1,500.00	(10) Amarillo, Tex., dry-land project 1,500.00
(11) Dalhart, Tex., dry-land project. 3,550.00 This is an independent station where the work is essentially similar to that of the Akron, Colo., project, previously described. The land and improvements were furnished by the citizens of Dalhart and vicinity. As at the Akron station, many offices of the Bureau of Plant Industry are conducting experiments at this point. <i>Results.</i> —Hail, torrential rains, and drought have influenced the results at this station, both in 1908 and 1909. Some exceedingly valuable results have been obtained, however, which have a very direct bearing upon the economic problems involved.	(11) Dalhart, Tex., dry-land project 4,000.00	(11) Dalhart, Tex., dry-land project 4,000.00
(12) Judith Basin, Mont., dry-land project. 1,850.00 The work on this project is essentially similar to that of the Akron and Dalhart projects previously described, with the added feature of the cooperation of the Montana Agricultural Experiment Station, which furnishes teams and equipment. <i>Results.</i> —The work is now well organized and some excellent results have been obtained, similar to those of the other stations already described.	(12) Judith Basin, Mont., dry-land project 1,700.00	(12) Judith Basin, Mont., dry-land project 1,800.00
	(13) Huntley, Mont., dry-land project 300.00 The work at this point is conducted in close cooperation with the Office of Western Agricultural Extension of this bureau, which is charged with the management and support of the station. The dry-land work is similar to that at other points. NOTE.—For a further description of the work of this station see under Western Agricultural Extension (immediately following).	(13) Huntley, Mont., dry-land project 300.00
	(14) Scottsbluff, Nebr., dry-land project 2,500.00 This station is located on an irrigation project, and the work is to be conducted in cooperation with the Nebraska Experiment Station. The work of this office will be essentially similar to that on the other dry-land projects. NOTE.—For a further description of the work of this station see under Western Agricultural Extension (immediately following).	(14) Scottsbluff, Nebr., dry-land project 2,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
WESTERN AGRICULTURAL EXTENSION.		
(Carl S. Scofield, agriculturist in charge.)		
Salaries, statutory.....	\$2,560.00	Salaries, statutory..... \$4,200.00
Salaries, lump fund.....	13,808.70	Salaries, lump fund..... 37,800.00
Miscellaneous expenses and supplies.....	1,222.28	Miscellaneous expenses and supplies..... 7,000.00
Traveling and field expenses.....	6,789.02	Traveling and field expenses..... 29,580.00
Total.....	24,380.00	Total..... 78,580.00
PROJECTS.		
(1) General supervisory and office work.....	9,805.45	(1) General supervisory and office work..... 15,400.00
This project includes the planning and general direction of the field work, the summarizing of results, the carrying on of correspondence, and all necessary traveling expenses in supervising the field work.		
<i>Results.</i> —The results obtained under this project are shown in the progress noted under the other projects, described in the following paragraphs.		
(2) Fallon, Nev., experiment farm.....	3,680.00	(2) Fallon, Nev., experiment farm.. 12,500.00
This farm is located on the Truckee-Carson Reclamation Project, the work being conducted in cooperation with the United States Reclamation Service of the Department of the Interior. The work consists of trials of various field and forage crops to ascertain which crop plants are best adapted to the conditions existing on this project. The objects are to find crops better adapted to this region than the very few now grown there and to work out rotations that will be profitable and that will improve the soil. In cooperation with other offices of the Bureau of Plant Industry, local problems of plant nutrition are being investigated in order to help new settlers in their task of subduing the raw desert soil.		
<i>Results.</i> —This farm includes 160 acres of land, of which about 50 acres have been leveled and put under irrigation. Two years' trials have shown that sugar beets of high quality can be produced; that Indian corn can be grown successfully; and that potatoes of excellent quality can be grown. Extensive trials of varieties of melons and onions show which varieties are best suited to this region. The teams and general equipment of the farm are being augmented during the present year, and to this fact is due the increased expenditure shown in the opposite column.		
(3) Yuma, Ariz., experiment farm.....	6,527.00	(3) Yuma, Ariz., experiment farm.. 10,000.00
This work also is conducted on one of the irrigation projects of the Reclamation Service. The experiments have for their object a demonstration of how best to utilize the relatively high-priced land on this tract. The region is now producing almost nothing but alfalfa, but it is believed that cotton, corn, and heavy truck crops can be used in rotation with winter-growing legumes, thus keeping the land always occupied and producing high returns. Experiments with various high-priced crops, including orchard and timber crops, are being conducted in cooperation with other offices of this bureau and with the Forest Service.		
<i>Results.</i> —Highly successful yields of Egyptian cotton have been secured at this farm, and considerable emphasis has been placed on that portion of the work during the past year. In order to anticipate the problems that may arise in connection with the establishment of this new industry, it has been necessary to take up the question of determining the best crops to be grown in rotation with cotton, and also to investigate the marketing possibilities of the crop. These lines of work are both well under way, and there now seem to be good reasons for believing that Egyptian cotton may be profitably grown in the Southwest.		
Experiments with Eucalypts have shown that these trees can be grown on the extensive overflowed lands of the valley, replacing cottonwood and willows.		
A new farm of 150 acres has been provided by the Reclamation Service, which is now being equipped with teams, tools, and general farm equipment. This work has required an increased expenditure, as shown in the opposite column.		
(4) San Antonio, Tex., experiment farm.....	4,367.55	(4) San Antonio, Tex., experiment farm..... 8,500.00
The work at this point consists of the testing of new varieties of crops for the region around San Antonio. The work also includes tests of standard crops; experiments with tillage and rotation methods to secure the best crop yields without irrigation; a study of the moisture requirements of the crops grown and the effect of different tillage methods on the absorption and retention of moisture in the soil; and trials of many varieties of orchard fruits, chiefly peaches, plums, apricots, figs, and olives, including introduced varieties, and the use of various stocks in propagating these trees. The work of the San Antonio farm is conducted with special reference to the cotton boll weevil problem. It has been found that injuries by the boll weevil are much less in a dry climate than in a humid one, and it is therefore important to press the culture of cotton as far west into t as possible. The region surrounding San		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
WESTERN AGRICULTURAL EXTENSION—Continued.	WESTERN AGRICULTURAL EXTENSION—Cont'd.	WESTERN AGRICULTURAL EXTENSION—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>Antonio is essentially arid, but good crops of cotton can be obtained by proper methods of tillage.</p> <p><i>Results.</i>—Excellent crops of corn and cotton have been produced at San Antonio as a result of good tillage methods. The total eradication of Johnson grass has been accomplished in fields that were completely infested, and careful records of the labor involved show that this eradication may be effected at a cost of less than \$1.25 per acre.</p> <p>A set of 30 varieties of peaches has been fruited for two years, and it is now possible to recommend to farmers the varieties that may be selected to succeed for special seasons or purposes. It has also been shown that fallowing land has other beneficial effects than conserving moisture.</p> <p>NOTE.—During the fiscal year 1909 the Bellefourche Farm was operated entirely by the Office of Dry Land Agriculture Investigations. (See preceding pages.)</p>	<p>(5) Bellefourche, S. Dak., experiment farm..... \$7,620.00</p> <p>This farm, which is operated jointly with the Office of Dry Land Agriculture Investigations, consists of 200 acres, of which about one-half is irrigable. The farm lies within the Bellefourche Reclamation Project and is maintained in cooperation with the Reclamation Service. Experimental work is also being carried on in cooperation with other offices of the Bureau of Plant Industry. The work so far has been without irrigation, since no water is yet available.</p> <p><i>Results.</i>—The cooperative work in breeding forage crops has yielded varieties of alfalfa, sorghum, and millet well suited to the region. Valuable varieties of cereals have been selected and propagated, and experiments with tillage methods and crop rotation are showing the best methods of treating the land to secure crops of grain and forage.</p> <p>(6) Huntley, Mont., experiment farm..... 7,965.00</p> <p>This work is conducted in cooperation with the United States Reclamation Service and the Montana Agricultural Experiment Station, on three tracts of land on the Huntley Irrigation Project, aggregating 200 acres. Experiments are planned to determine what crops, tillage methods, and rotations of crops are best suited to this region. Experiments and demonstrations will also be conducted in cooperation with other offices of this bureau. The land is being prepared for next season's work and the necessary equipment is being secured. The farm will be in full operation by next season.</p> <p>(7) Klamath, Oreg., experiment farm..... 6,965.00</p> <p>This work is conducted in cooperation with the Reclamation Service on a 40-acre tract of marsh land which has been leased for the purpose and which is typical of one-third of the Klamath Reclamation Project, of which it is a part. The experiments are planned to show the best methods of subduing this marsh land, the crops that are best suited to it, and how irrigation water may be applied to these crops. About 10 acres of the farm have been plowed and prepared for next season's crop and about 15 acres have been disked and will also be planted in the spring. The peculiar nature of the marsh land has required the use of specially designed implements for the work. As on the Huntley Farm, the work here will be in full operation in another season.</p>	<p>(5) Bellefourche, S. Dak., experiment farm..... \$8,000.00</p> <p>(6) Huntley, Mont., experiment farm..... 8,600.00</p> <p>(7) Klamath, Oreg., experiment farm..... 7,850.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
WESTERN AGRICULTURAL EXTENSION—Continued.	WESTERN AGRICULTURAL EXTENSION—Cont'd.	WESTERN AGRICULTURAL EXTENSION—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(8) Umatilla, Oreg., experiment farm..... \$3,000.00 This work is conducted in cooperation with the Reclamation Service and the Oregon Agricultural Experiment Station, on a tract of 40 acres of land on the Umatilla Reclamation Project. The farm is operated by the Oregon station under cooperative plans made with this bureau. The experiments and demonstrations will deal with methods of subduing the land and the establishment of orchard crops to which the region appears to be well adapted, and the trial of varieties of these crops, together with small fruits and vegetable crops. The work so far has been the purchase of the necessary equipment and putting the land in grain and alfalfa preparatory to experimental planting.	(8) Umatilla, Oreg., experiment farm..... \$3,000.00
	(9) Williston, N. Dak., demonstration work..... 2,730.00 This work is conducted on a farm owned and operated by the North Dakota Agricultural Experiment Station on the Williston Reclamation Project. Two experts are employed by this department to conduct experiments and demonstrations on this experiment farm, and to assist farmers on the project in using the best methods of irrigating their crops and in determining what crops can be most profitably grown in that region. The work so far has been directed toward preparing the land on the experiment farm for irrigation and in aiding the farmers in laying out their fields and applying water. The Office of Dry Land Agriculture Investigations of this bureau is also conducting work at Williston, as are several other offices of the bureau.	(9) Williston, N. Dak., demonstration work..... 2,730.00
	(10) Scottsbluff, Nebr., experiment farm..... 2,000.00 This farm is operated jointly with the Office of Dry Land Agriculture Investigations of this bureau. The farm is located on the North Platte Reclamation Project, and the experiments here described are to be conducted on the irrigated portion of the tract, with the object of demonstrating what crops are best suited to this region, to test varieties of these crops, and to determine the methods of tillage and rotation best suited to the conditions. The work so far has been of a preliminary nature, and a full series of experiments will be inaugurated next season.	(10) Scottsbluff, Nebr., experiment farm..... 2,000.00
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS.
(T. H. Kearney, physiologist in charge.)	(T. H. Kearney, physiologist in charge.)	(T. H. Kearney, physiologist in charge.)
Salaries, statutory..... \$700.00	Salaries, statutory..... \$1,200.00	Salaries, statutory..... \$1,200.00
Salaries, lump fund..... 6,017.17	Salaries, lump fund..... 7,940.00	Salaries, lump fund..... 9,600.00
Miscellaneous expenses and supplies..... 1,690.00	Miscellaneous expenses and supplies..... 3,210.00	Miscellaneous expenses and supplies..... 2,700.00
Traveling and field expenses..... 3,403.88	Traveling and field expenses..... 6,400.00	Traveling and field expenses..... 5,200.00
Total..... 11,811.05	Total..... 18,750.00	Total..... 18,700.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS. (1) Breeding Egyptian cotton for the Southwest..... \$2,600.00 <p>The object of this work is to secure by acclimatization and breeding a strain of cotton of the Egyptian type adapted to growing under irrigation in the Colorado River Valley and adjacent territory, and to demonstrate the best cultural methods for producing the crop. The work is being carried on in cooperation with other offices of the bureau.</p> <p><i>Results.</i>—A highly productive strain having a desirable shape of plant, large bolls, and very strong fiber of good length and fineness has been developed at Yuma, Ariz. The indicated yield this year on a 4-acre field is one bale per acre. It is proposed to test this strain at various localities in the region next year, and if it maintains its fertility, uniformity, and good lint qualities it is believed that it will constitute a satisfactory basis for a high-grade cotton industry in southern Arizona and California. Next year experimentation will be largely directed to working out a satisfactory system of irrigating this type of cotton.</p> (2) Breeding alkali-resistant crop plants..... 2,700.00 <p>The object of this work is to test the alkali resistance of the crop plants now grown or being introduced in the Western States with a view to selecting those varieties which prove best adapted to alkali soils; also to work out the best cultural methods for growing resistant plants on land of this nature. This work is being carried on in cooperation with the Nebraska Experiment Station and with the Office of Western Agricultural Extension of this bureau.</p> <p><i>Results.</i>—During the past year effort was largely directed toward ascertaining the amount of alkali permitting different species and varieties of cereals and forage plants to germinate and make their first growth, this being the critical period which determines whether or not a plant can maintain itself in soil containing an excess of alkali. It was found that amber sorghum could make this early growth in the presence of much more alkali than could wheat, oats, or barley. Canada peas and scarlet vetch were also found capable of germinating and developing through the seedling stage in the presence of about 1 per cent of total salts. In test plots for the comparison of intertillage with broadcasting, the former method appeared to be the most suitable for field peas and vetch in alkali land.</p> (3) Breeding drought-resistant crop plants..... 2,300.00 <p>The object of this work is to produce drought-resistant strains of crop plants, especially forage plants, adapted to growing in districts where dry farming is practiced. The work is being carried on at the dry-land stations at Bellefourche, S. Dak., and Akron, Colo., in cooperation with other offices of the bureau.</p> <p><i>Results.</i>—A strain of alfalfa which is very uniform and productive and gives promise of being drought resistant, as well as hardy, has been developed at Bellefourche from a selection of the Grimm variety made by the South Dakota Experiment Station at its Highmore substation. Highly productive strains of Kursk millet and <i>Bromus inermis</i> and an early ripening strain of amber sorghum have also been developed at Bellefourche, in continuation of work begun at Highmore. All of these plants will be distributed to farmers on the Bellefourche Reclamation Project and adjacent territory as soon as a sufficient stock of seed can be secured.</p> <p>Work has also been begun in breeding a drought-resistant strain of Canada field pea to meet the need of an annual leguminous forage plant for growing in rotation in the Great Plains region. Individual selections of western wheat-grass, one of the best native hay and pasture grasses of the plains, are being grown with a view securing an improved strain adapted to culture. In cooperation with another office of the bureau, the drought resistant Chemlaly olive has been introduced from northern Africa and experimental dry-land orchards have been started in southern Texas and Arizona.</p> (4) Study of the physiology of alkali resistance and drought resistance..... 2,511.05 <p>This work is being carried on both in the field and in the laboratory with a view to studying the factors which constitute resistance to alkali and to drought, since selections for alkali and drought resistance can be made more intelligently if we know precisely to what characteristics of the plants these qualities are due. It is believed that the comparative study of the root systems will also serve as a guide in working out the best dry-farming tillage methods for the different species and varieties of crop plants.</p> <p><i>Results.</i>—The root habits and the structure of the above-ground parts of plants, with reference to reduction of transpiration and hence conservation of moisture</p>	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS. (1) Breeding Egyptian cotton for the Southwest..... \$5,346.00 (2) Breeding alkali-resistant crop plants..... 3,600.00 (3) Breeding drought-resistant crop plants..... 3,152.50 (4) Study of the physiology of alkali resistance and drought resistance..... 3,215.00	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS. (1) Breeding Egyptian cotton for the Southwest..... \$5,750.00 (2) Breeding alkali-resistant crop plants..... 3,146.00 (3) Breeding drought-resistant crop plants..... 3,152.50 (4) Study of the physiology of alkali resistance and drought resistance..... 3,215.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>taken up by the roots have been extensively investigated. A great many species and varieties are being compared both in the field and under control conditions in the laboratory to ascertain the minimum amount of soil moisture which will permit them to remain alive, this being the best measure of absolute drought resistance.</p> <p>(5) Study of indicator value of native vegetation..... \$1,700.00</p> <p>The object of this project is to work out correlations between the different types of natural plant covering and the environment in which they occur, as well as the adaptability of each environment to different crop plants. It is believed that such correlations, carefully worked out, will afford a safe basis for making rapid agricultural reconnaissances and land classifications in the Great Plains region. This work is being carried on chiefly in eastern Colorado.</p> <p><i>Results.</i>—It has been found that the so-called "short grass" vegetation characterizes land in which moisture penetrates very slowly and to only a slight depth, and that such land is best adapted to comparatively shallow-rooted and early maturing plants, like the small grains. On the other hand, the "bunch grass" vegetation characterizes the looser soils into which moisture penetrates rapidly and to great depth; such land is best suited to late maturing crops like corn and will probably prove most suitable for alfalfa and other deep-rooted plants. Farther east in the Great Plains region it is found that this correlation no longer strictly applies, since the greater rainfall allows more water to penetrate the heavier land and to a greater depth. Consequently such land, on which in Colorado only the shallow-rooted Buffalo and Grama grasses grow, in central Kansas bears a growth of bunch grass.</p>	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>(5) Study of indicator value of native vegetation..... \$2,799.00</p> <p>(6) Testing and breeding of pomegranates..... 637.50</p> <p>The object of this work is to secure all known varieties of the pomegranate from different parts of the world, to test them comparatively in order to ascertain what varieties are most promising for commercial and home growing in this country, and to improve them by selecting the most promising individuals. There is a steady though small demand for pomegranates in the city markets. The fruit is also a popular one in the hotter, drier parts of the country and its popularity can doubtless be greatly increased by the introduction of superior varieties.</p> <p><i>Results.</i>—Some of the best varieties from northern Africa, Spain, Mexico, Syria, and other countries have already been secured and are being tested at various localities in the Southwest from western Texas to southern California. A large number of seedlings are also being grown at these stations in the hope of developing new varieties thoroughly adapted to the climatic and soil conditions of the Southwest.</p>	ALKALI AND DROUGHT RESISTANT PLANT BREEDING INVESTIGATIONS—Continued. PROJECTS—continued. <p>(5) Study of indicator value of native vegetation..... \$2,799.00</p> <p>(6) Testing and breeding of pomegranates..... 637.50</p>
PHYSICAL INVESTIGATIONS. (Lyman J. Briggs, physicist in charge.) Salaries, statutory..... \$600.00 Salaries, lump fund..... 8,737.00 Miscellaneous expenses and supplies..... 2,821.22 Traveling and field expenses..... 3,954.28 Total..... 16,112.50	PHYSICAL INVESTIGATIONS. (Lyman J. Briggs, physicist in charge.) Salaries, statutory..... \$600.00 Salaries, lump fund..... 9,312.50 Miscellaneous expenses and supplies..... 2,197.50 Traveling and field expenses..... 4,000.00 Total..... 16,110.00	PHYSICAL INVESTIGATIONS. (Lyman J. Briggs, physicist in charge.) Salaries, statutory..... \$840.00 Salaries, lump fund..... 9,250.00 Miscellaneous expenses and supplies..... 2,205.00 Traveling and field expenses..... 3,800.00 Total..... 16,095.00
PROJECTS. (1) Office and laboratory work..... 4,500.00 <p>This project includes the routine laboratory work in connection with the physical investigations; the general office details and correspondence; and other similar features connected with the field work.</p> <p><i>Results.</i>—The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs.</p>	PROJECTS. (1) Office and laboratory work..... 4,440.82	PROJECTS. (1) Office and laboratory work..... 4,495.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
PHYSICAL INVESTIGATIONS—Continued.	PHYSICAL INVESTIGATIONS—Continued.	PHYSICAL INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Physical investigations in the dry farming regions..... \$8,612. 50 <p>This work is carried on in cooperation with the other offices of the bureau engaged in the investigation of crops grown on limited rainfall. The work consists of the study and comparison of the environmental conditions under which crops are produced in the different dry-farming sections of the western United States, together with a study of the nutrition of crop plants under these conditions. These measurements are necessary for the proper interpretation and highest development of the rotation and cultivation experiments and for determining what methods of farming are most efficient in conserving soil moisture and maintaining a proper supply of plant food in the soil.</p> <p><i>Results.</i>—Special attention has been given to measuring accurately the amount and distribution of the rainfall, and its penetration into the soil under different systems of cultivation. These measurements show that the loss of water through run-off constitutes one of the most serious problems with which the dry farmer has to deal. The attention of the farmers has heretofore been directed mainly to preventing evaporation from the soil by means of a mulch. The soil conditions which prevent evaporation are not, however, those which are most favorable for absorbing the rainfall. The work of the past year has shown that the dust mulch is often so packed by a heavy rain that the loss from run-off is very great. Methods of handling the land so as to absorb all the rainfall, as well as to conserve it, will greatly extend dry-farming operations. This important problem is being given earnest attention at our dry-land experimental farms.</p>	(2) Physical investigations in the dry-farming regions..... \$9,066. 48	(2) Physical investigations in the dry-farming regions..... \$9,000. 00
(3) Miscellaneous physical investigations..... 3,000. 00 <p>The investigations under this heading are conducted in the laboratory and in the field, and include the development of improved apparatus for determining the moisture content of grain; "electro-cultural" experiments, both in the greenhouse and in the field, to determine whether plant growth is affected by electrostatic fields of varying intensity, and, if so, whether plants can be forced economically in this way; tobacco fertilizer experiments, to determine the cause of the greatly diminished yields of cigar leaf tobacco in certain parts of the Connecticut Valley and to devise a practical remedy; and investigations bearing on plant nutrition, having for their object the correction of unfavorable nutrient solutions in the soil which lead to the malnutrition of the plant.</p> <p><i>Results.</i>—During the past year a method has been developed for the rapid determination of the moisture content of wheat samples. This method is based upon the resistance offered to the passage of an electric current through the grain. This resistance decreases very rapidly as the moisture content of the grain increases. The work so far has been confined mainly to wheat. A great deal of interest has been shown in the method by persons engaged in the shipment and storage of grain, and the applicability of the method to other grains and grain products will be tested during the coming year.</p> <p>In the electro-cultural experiments the results have not shown any marked increase either in growth or quality due to the electrical treatment. Interested persons have consequently been advised upon inquiry to use caution in investing in expensive equipments which are claimed to give remarkable increases in yield and quality of vegetables and small fruits until further tests can be made by the department.</p> <p>In the tobacco fertilizer experiments, which have been completed, it was found that the trouble was due to a soil fungus which attacked the roots of the tobacco plants, and that this fungus attacks the tobacco only when the soil is alkaline. This alkaline condition is produced by the excessive use of carbonate of potash as fertilizer. The remedy found consists in avoiding carbonate of potash. In badly affected fields the use of acid phosphate to counteract the alkalinity of the soil was advised, and this treatment was followed by the growers with much success. In one field of 60 acres where this treatment was followed the yield was practically double that of the preceding year.</p>	(3) Miscellaneous physical investigations..... 2,602. 70	(3) Miscellaneous physical investigations..... 2,600. 00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS.		
(W. J. Spillman, agriculturist in charge.)		
Salaries, statutory.....	\$8,905.01	Salaries, statutory..... \$17,840.00
Salaries, lump fund.....	58,444.76	Salaries, lump fund..... 82,019.00
Miscellaneous expenses and supplies.....	8,732.32	Miscellaneous expenses and supplies..... 6,230.16
Traveling and field expenses.....	25,669.32	Traveling and field expenses..... 43,424.84
Total.....	101,751.41	Total..... 149,514.00
PROJECTS.		
(1) Administrative and supervisory work.....	17,039.39	(1) Administrative and supervisory work..... 14,810.50
This project includes the planning and general direction of the farm-management investigations; the conduct of correspondence; and other details connected with the work.		
<i>Results.</i> —The results under this project are reflected in the progress and results noted under all of the other projects described in the following paragraphs.		
<i>Southern farm-management districts.</i>		
(2) General supervisory and office work.....	5,740.01	(2) General supervisory and office work..... 5,450.00
This project includes the general supervision of the farm-management work in the South; the conduct of correspondence; the preparation of manuscript for publication; the keeping of records; and other details connected with the work.		
<i>Results.</i> —The results under this project are a part of the progress and results noted under all of the other southern projects described in the following paragraphs.		
(3) District 4, Virginia, Maryland, and Delaware.....	2,400.00	(3) District 4, Virginia, Maryland, and Delaware..... 2,400.00
The work in this as well as in all of the other farm-management districts consists of the study of the types of farming prevailing in the section, the types giving the best results, and the relation of the various types to local conditions of soil, climate, markets, labor, etc.; of the cropping systems in vogue on different types of farms; of the relation of individual crops to local conditions; of the methods used in the production and utilization of individual crops; of the dates when crops may be planted and when they are available for use for different purposes when planted at a particular time; and a detailed study of the systems of management on particular farms on which important problems have been solved. Working plans are made for selected farms with a view to rendering them objects of local interest and the means of teaching improved methods by example. In some of the older districts object-lesson farms have been established, which are visited occasionally in order to see that the plans are properly carried out. Farmers' meetings are held in cooperation with state organizations, and the results of the work are published as obtained.		
<i>Results.</i> —The main results accomplished in District No. 4 have been to obtain a familiarity with the more important problems confronting the farmers in the district. We are now in possession of accurate knowledge concerning the crops adapted to various sections of the district, and of the types of farming which are to be recommended. Farmers in southeastern Virginia who have hitherto thought their hay have been induced to grow a considerable quantity for themselves. A good knowledge has been obtained of the fertilizer requirements of the various soils in the district.		
(4) District 5, North Carolina, South Carolina, Georgia, and Florida.....	2,900.00	(4) District 5 North Carolina, South Carolina, Georgia, and Florida..... 3,200.00
The work in this district is essentially similar to that in District 4, just described, but has special reference to the diversification of farming in a region hitherto inclined too much to single-crop systems of farming. In those farm management districts, which embrace the cotton territory, the work is planned and carried out with the special object of assisting the farmers in preparing for the ravages of the boll weevil.		
<i>Results.</i> —A large number of farmers' meetings have been held throughout District No. 5, and a great deal of interest has been aroused, especially in diversified farming, particularly dairying, trucking, production of hay, growing of beef cattle, hogs, and poultry, and the use of winter cover crops. The value of hay production has been demonstrated by the experience of a number of farmers in Georgia who have grown wealthy from this type of farming.		
During the past year the operations of a very remarkable farm in South Carolina have been studied, and the results have been prepared for publication as a Farmers' Bulletin. The owner of this farm has developed a worn-out, sandy farm that previously made only 8 bushels of corn and one-fifth of a bale of cotton per acre, to a point where it now produces 2 bales of cotton, 85 bushels of corn, and 80 bushels of oats per acre.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Southern farm-management—Continued.	Southern farm-management—Continued.	Southern farm-management—Continued.
(5) Demonstration work in South Carolina..... \$2,000.00 This work is closely related to the work of District 5, just described, and consists of extensive demonstrations in cooperation with the South Carolina Agricultural Experiment Station, the State Department of Agriculture, and also with the Farmers' Cooperative Demonstration Work conducted by this bureau. The objects of the work are to increase yields, reduce the cost of production, and to diversify agricultural industries in the State. <i>Results.</i> —General interest has been aroused in the State in improved methods of farming, and the farmers generally are beginning to make use of leguminous crops for the purpose of building up the soil. Improved methods adopted by the farmers have brought increased crop yields, and methods of tillage have improved very materially all over the State. The number of farmers who have volunteered to conduct this demonstration work has been very large, many more, in fact, than could be accommodated. Definite demonstrations have been started on about thirty farms. These demonstrations cover many phases of farming. Special attention is being given to winter legumes as green manure and winter forage crops. During the past winter one cooperator grew 60 acres of winter vetch, and many of his neighbors will sow this crop this fall. Similarly, as a result of one crop of crimson clover at Union, Ala., many hundred acres of this crop will be sown next season. Bur clover has been found successful in all parts of South Carolina, and is being largely sown as a winter cover crop and green manure.	(5) Demonstration work in South Carolina..... \$3,180.00	(4) Demonstration work in South Carolina..... \$3,380.00
(6) District 7, Mississippi, Alabama, and western Tennessee. 2,800.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the diversification of agricultural industries in a section hitherto devoted too much to single-crop systems of farming. The problems in this district are very similar to those in District 5, having a special bearing on the boll-weevil problem. <i>Results.</i> —The most notable result of the work in this district is the extension of alfalfa culture on the black prairie soils of Alabama and Mississippi. Five years ago a demonstration farm was established at Uniontown, Ala., on which fifteen acres of alfalfa were sown. Since that time large acreages of alfalfa have been sown in that community. This season \$3,000 worth of alfalfa seed was sown at Uniontown alone. The farmers of that section no longer fear the boll weevil. Alfalfa culture is extending rapidly over the prairie soils of Alabama and Mississippi. More attention is being given to live-stock farming than formerly, especially to hog raising. The fertility of the soil has been greatly improved through the growing of alfalfa, and the value of farm lands has increased accordingly. During the past year a careful agricultural reconnaissance has been made of the Fourth Congressional District of Tennessee. The special needs of this district are better systems of cropping, especially systems including leguminous crops. Soy beans are especially recommended. This section is adapted to all kinds of stock farming, and an effort is being made to encourage this industry.	(6) District 7, Mississippi, Alabama, and western Tennessee..... 2,750.00	(6) District 7, Mississippi, Alabama, and western Tennessee..... 2,350.00
(7) See next column. During 1909 this work was a part of the preceding project (District No. 7).	(7) Demonstration work in Alabama..... 2,630.00 This work is closely related to the work of District No. 7, just described, and is conducted in cooperation with the Alabama Agricultural Experiment Station. The object of the work is to teach by actual demonstrations the diversification of agriculture as a means of combating the cotton boll weevil. <i>Results.</i> —See the results in the preceding column for prior work in Alabama. The work under this project was begun in the summer of 1909, its general plan being to extend to other parts of the State the results achieved so successfully in the vicinity of Uniontown. While the farmers of the State are beginning to show a very satisfactory interest in the work, it is too early to state definite results.	(7) Demonstration work in Alabama..... 2,630.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Southern farm-management districts—Continued.	Southern farm-management districts—Continued.	Southern farm-management districts—Cont d.
(8) District 15, Louisiana and Arkansas..... \$3,000.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the diversification of farming with a view to combating the boll weevil, and to the general improvement of the agriculture of the district. <i>Results.</i> —The demands for lectures on farm management in this district have been unusual during the past year, the farmers showing a great interest in improved methods. During the year the largest interest has been shown in the extension of certain leguminous crops, both for forage and for their effect upon the land. Special attention has been given to cowpeas. The cowpea crop is highly developed here and special study has been made of the farm methods of handling the crop in southeastern Missouri, western Kentucky, and western Tennessee. The cultivation of cowpeas is increasing in this section, due largely to the recent introduction of satisfactory threshing machines. A large number of these machines were sold in Arkansas during the past year. Extensive demonstration work has been conducted in the vicinity of Thornton, Ark., during the past year. As a result of this work ten carloads of potatoes have been shipped out of that section this season. It is believed that the quantity of this crop produced next season will be much greater.	(8) District 15, Louisiana and Arkansas..... \$3,200.00	(8) District 15, Louisiana and Arkansas..... \$3,200.00
(9) District 16, Oklahoma and Texas..... 3,650.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the cotton boll-weevil problem, including the diversification of crops and the general improvement of farm practice. The problems are very similar to those in the other districts located in the boll-weevil territory. <i>Results.</i> —In Texas considerable interest has been manifested in diversified farming. At Dallas the success of alfalfa has been demonstrated, and oats, wheat, and corn have been grown more profitably than cotton. At Eastland the value of sorghum and cowpeas as forage crops and of yellow milo as a reliable grain crop has been shown. Studies of agricultural conditions have been made in various sections of Texas, especially the west and north-west portions, now rapidly developing as agricultural districts. A great influx of settlers is also taking place in extreme southern Texas, and a good deal of land is being sold in sections where success is highly problematical. In all of these sections settlers should be careful in selecting land and should use the utmost care in the management of the soil. Extended droughts are not uncommon. The crops that do best in the Northern Plains area are kafir, milo, sorghum, pumpkins, cushaws, and potatoes. Wheat and oats are rather uncertain. The most reliable crops in the Southern Plains area include those of the north and in addition cotton, cowpeas, peanuts, Bermuda grass, and bur clover. The uncertain crops are alfalfa, wheat, oats, emmer, and corn. Some of the small fruits and many vegetable crops are successful in ordinary seasons. Settlers are being advised as to the agricultural prospects of these districts.	(9) District 16, Oklahoma and Texas..... 6,600.00	(9) District 16, Oklahoma and Texas..... 6,600.00
(10) Agricultural survey of Oklahoma..... 800.00 This work was conducted in close connection with the work of District 16, just described. The object was to secure accurate knowledge of the agricultural possibilities of the various sections of the State, as a basis for planning the farm management work to be undertaken. <i>Results.</i> —A very satisfactory account of the agriculture of all sections of the State of Oklahoma has been prepared and placed on file for reference in connection with the work in District 16.	(10) District 8, Kentucky, West Virginia, and East Tennessee..... 2,316.66 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the encouragement of better crop rotations, increased live-stock raising, and soil improvement. A further object is the introduction of more intensive farming in regions where extensive non-agricultural industries prevail and where, as a consequence, there is a good market for perishable farm products. This work was begun in August, 1909, and it is too early to give results.	(10) District 8, Kentucky, West Virginia, and East Tennessee..... 2,425.66

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Northern farm-management districts.</i>	<i>Northern farm-management districts.</i>	<i>Northern farm-management districts.</i>
(11) General supervisory and office work..... \$4,828.38 This project includes the general supervision of the farm-management work in the North; the conduct of correspondence; the preparation of manuscript for publication; the keeping of records; and other details connected with the work. <i>Results.</i> —The results under this project are a part of the progress and results noted under all of the other northern projects, described in the following paragraphs.	(11) General supervisory and office work..... \$4,970.00	(11) General supervisory and office work..... \$4,970.00
(12) District 1, New York and the New England States... 4,100.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the problems peculiar to this section of the United States. Dairy farming, sheep and hog raising, the production of forage and pasture crops, potato growing, and other types of farming are being studied in particular. <i>Results.</i> —It has been shown that the pressing problems of this district are (1) lack of labor; (2) high price of bought feeds; (3) poor cropping system; and (4) lack of knowledge of intensive types of farming. As a result of these studies we are now in position to recommend satisfactory cropping systems practically all over the district, and to advise farmers as to the crops adapted to their locality. A marked improvement in cropping systems is noticeable as a result of our work, and in some cases the value of agricultural lands has doubled as a direct result of the work. Publications on "Cropping Systems for New England Dairy Farms," "A Successful Dairy Farm," and other subjects have been issued and distributed.	(12) District 1, New York and the New England States..... 9,143.75	(12) District 1, New York and the New England States..... 9,543.75
(13) See next column. During 1909 this work was a part of that under the preceding project (District 1).	(13) Demonstration work in Maine. 2,400.00 This work is closely related to that in District 1, just described. Its objects are to extend potato culture into sections to which it is adapted and where it does not now prevail; to secure better cropping systems, especially on dairy farms; to increase the yield of hay; to encourage the home production of seeds, and to assist farmers generally in improving their methods. This work was begun as a separate project in July, 1909, and it is too early to report results.	(13) Demonstration work in Maine. 2,400.00
(14) See next column. No expenditure in 1909.	(14) Agricultural survey of New Hampshire..... 1,400.00 This work was undertaken at the beginning of the current fiscal year and is conducted in close relation with the work of District 1, previously described. The object is to secure a definite knowledge of agricultural conditions in selected representative localities of the State. Four townships have already been surveyed in detail and a record has been made of the types of farming and the general results of the methods used.	(14) Agricultural survey of New Hampshire..... 1,400.00
(15) District 3, Pennsylvania and New Jersey..... 2,800.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to the problems peculiar to this district, which varies widely in its adaptability to types of farming. <i>Results.</i> —We are beginning to secure a fair knowledge of the agricultural possibilities of these two States, but it is too early to give definite results. Thus far the work has been confined largely to central and southern New Jersey, but is being rapidly extended throughout the district. Special attention has been given to systems of management on the better class of dairy farms. Much information has been secured on the cost of producing sanitary market milk under different systems of farming and dairy management. Detailed working plans for dairy farms have been prepared, and these farms have served as models for the communities in which they are located.	(15) District 3, Pennsylvania and New Jersey..... 3,000.00	(15) District 3, Pennsylvania and New Jersey..... 3,000.00
(16) District 9, Ohio, Indiana, and Illinois..... 2,600.00 The work in this district is essentially similar to that in District 4, previously described, but has special reference to cropping systems for live-stock farms, the introduction of alfalfa, the rehabilitation of clover and the determination of the causes of its failure, and the general study and improvement of the types of farming adapted to the district. <i>Results.</i> —The areas adapted to alfalfa have been determined. The cause of the failure of clover has been ascertained, as well as means of rehabilitating the crop. The cropping systems adapted to the various types of live-stock farming have been worked out.	(16) District 9, Ohio, Indiana, and Illinois..... 4,600.00	(16) District 9, Ohio, Indiana, and Illinois..... 4,600.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Northern farm-management districts—Continued.	Northern farm-management districts—Cont'd.	Northern farm-management districts—Cont'd.
Considerable farmers' institute work has been done in this district, in cooperation with the Ohio state board of agriculture. This work has afforded an opportunity for spreading a knowledge of the farm practices which have been found most successful in different sections of the district. A farmers' bulletin on "Replanning the Farm for Profit" has been issued and distributed.		
(17) District 11, Wisconsin, Michigan, Minnesota, and the eastern Dakotas..... \$2,900.00	(17) District 11, Wisconsin, Michigan, Minnesota, and the eastern Dakotas..... \$3,000.00	(17) District 11, Wisconsin, Michigan, Minnesota, and the eastern Dakotas..... \$3,000.00
The work in this district is essentially similar to that in District 4, previously described, but has special reference to the utilization of the light sandy soils in the northern portion of the district, the types of cropping systems adapted to live-stock farms, and the improvement of agricultural practices generally.		
<i>Results.</i> —A fair knowledge of the agricultural possibilities of a large part of the district has been obtained, and methods have been worked out for utilizing the light sandy soils for successful farming. Some of the most profitable crops are potatoes, clover, peas for seed and canning, and the small grains. For immediate returns potatoes are undoubtedly the most important crop for the new settler. The growing of potatoes is being encouraged, as well as the rotation of crops, fall plowing, early planting, and the growing of the best varieties. This work is meeting with much favor among the farmers. Considerable work has been done in the dry-land sections of the district. A study of clover-seed farming on the jack-pine lands in the northern part of the district has also been made and the results published as a farmers' bulletin.		
(18) See next column. No expenditure in 1909.	(18) District 13, Iowa..... 2,600.00	(18) District 13, Iowa..... 2,600.00
	The work in this district is essentially similar to that in District 4, previously described, but has special reference to methods of reestablishing clover and of rehabilitating soils which are beginning to show the effects of continuous corn culture; also to types of farming adapted to the district and to cropping systems suitable for these types. This work has been only recently begun, and it is too early to give results.	
(19) See next column. No expenditure in 1909.	(19) District 14, Missouri..... 2,300.00	(19) District 14, Missouri..... 2,300.00
	The work in this district is essentially similar to that in District 4, previously described, with the additional features referred to under District 13 above. Cropping systems are being devised for a considerable number of farms, and these systems are now in practical operation. The work has been only recently begun and is making good progress.	
Western farm-management districts.	Western farm-management districts.	Western farm-management districts.
(20) See next column. This work was included in the other western projects in 1909.	(20) General supervisory and office work..... 3,943.75	(20) General supervisory and office work..... 3,943.75
	This project includes the general planning and supervision of the farm-management work in the West; the conduct of correspondence; the preparation of manuscript for publication; the keeping of records; and other details connected with the work.	
	<i>Results.</i> —The results under this project are a part of the progress and results noted under all of the other western projects, described in the following paragraphs.	
(21) District 18, Kansas, Nebraska, and eastern Colorado.... 2,700.00	(21) District 18, Kansas, Nebraska, and eastern Colorado..... 2,901.00	(21) District 18, Kansas, Nebraska, and eastern Colorado..... 3,101.00
The work in this district is essentially similar to that in District 4, previously described, but has special reference to methods of farming in semiarid regions, and to types of farming adapted to the varied sections of the district; also to cropping systems for various types of farming, and to the equipment required for successful farming.		
<i>Results.</i> —The crops best suited to the various soils and rainfall zones of this region have been determined, and a general idea of the types of farming prevailing has been obtained. We find the methods common to new, rich sections. The farming consists largely of grain and hay production, more especially grain. In the eastern part of the district, and in some localities elsewhere, a great		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Western farm-management districts—Continued.</i>	<i>Western farm-management districts—Cont'd.</i>	<i>Western farm-management districts—Cont'd.</i>
deal of stock is raised. Little attention is paid by farmers to definite cropping systems or to methods of keeping up the soil fertility.		
Many farmers and ranchmen have been visited during the past season, and a number of public lectures were given. Working plans have been made for a number of farms in the district. Suggestions for the better management of farms have been furnished. Publications have been issued on the distribution of native legumes in eastern Nebraska and Kansas, and on other subjects of interest to the region. The settlers on the North Platte reclamation project, in Nebraska, have been aided by means of advice and publications. An agricultural survey of the State of Nebraska is nearing completion.		
(22) District 20, Montana, Wyoming, and the western Dakotas..... \$5,150.00	(22) District 20, Montana, Wyoming, and the western Dakotas \$3,001.00	(22) District 20, Montana, Wyoming, and the western Dakotas.... \$3,001.00
The work in this district is essentially similar to that in District 4, previously described, but has special reference to methods of farming in semiarid and irrigated sections; the types of farming adapted to the district; and especially the types adapted to range practice, since stock ranging is an important type of farming in the district.		
<i>Results.</i> —A good knowledge has been obtained of ranch methods, and a careful agricultural survey has been made of two counties in Montana, as well as of western North Dakota and western South Dakota, so that we are now in position to give important information to settlers in those sections concerning lands, crops, and types of farming. An article entitled "Hints to Settlers on the Sun River Project, Montana," has been issued during the past year. Special studies have been made of the production of forage for stock, not only in this district but generally throughout the country.		
(23) District 24, Oregon, Washington, and Idaho..... 2,800.00	(23) District 24, Oregon, Washington, and Idaho..... 3,100.00	(23) District 24, Oregon, Washington, and Idaho..... 3,100.00
The work in this district is essentially similar to that in District 4, previously described, but has special reference to wheat culture, farming on irrigated lands, dairying, hog raising, methods of tillage, crop rotations, the use of lime, etc.		
<i>Results.</i> —Very gratifying results have followed the publication of certain bulletins relating to this district. Farmers' Bulletin 294, entitled "Farm Practice in the Columbia Basin Upland," has had a marked effect in improving the tillage in the drier sections of these States. The result has been a marked increase in the yield of crops, especially wheat. Prior to the publication of Farmers' Bulletin 271, "Forage Crop Practices in Western Oregon and Western Washington," thousand-headed kale was grown by only a few farmers in the Willamette Valley. Practically every dairyman in western Oregon now depends on this crop for succulent feed during the winter months, and it is rapidly becoming a popular crop in western Washington.		
It has been found possible to grow wheat in this district with less than 12 inches of rainfall. A number of varieties of winter wheat have been found which seem to be adapted to local conditions and which make good flour. A careful study has been made of the crops grown and method of feeding practiced by the most successful hog growers, the results of which are ready for publication. A study of weeds has also been made, and it has been shown that the small-leaved milkweed, so troublesome in many of the grain fields of northern Idaho and eastern Washington, can be completely eradicated by seeding the land to timothy or some other true grass and pasturing closely with sheep for two years.		
(24) See next column. No expenditure in 1909.	(24) Agricultural survey of Whatcom County, Wash..... 675.00	(24) Agricultural survey of Whatcom County, Wash..... 675.00
	This work is closely related to the work in District 24, just described, its objects being to ascertain the relation between soil types and crops, fertilizers, and methods of tillage. Whatcom County is the northwesternmost county of the United States, and little is known of its agricultural possibilities. The survey has not yet progressed sufficiently to permit a statement of results.	
	(25) Agricultural survey of Alaska... 1,120.00	(25) Agricultural survey of Alaska... 1,120.00
	This work was undertaken at the beginning of the present fiscal year, its object being to determine the approximate areas of Alaska which are suited for agriculture. The areas south of the coast range of mountains have been mapped, and it is the aim to give accurate information to settlers regarding the agricultural possibilities of the territory.	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Special studies of farm practice.</i>	<i>Special studies of farm practice.</i>	<i>Special studies of farm practice.</i>
(26) Tillage methods..... \$2,825.00	(26) Tillage methods..... \$4,100.00	(26) Tillage methods..... \$4,450.00
The objects of this work are to determine the methods of tillage used for different crops in all sections of the country, and to ascertain the effectiveness of these methods. Experiments are being conducted to learn the fundamental principles underlying tillage, much of this work being in cooperation with the state experiment stations.		
<i>Results.</i> —A great quantity of information has been collected concerning implements and methods of tillage in all parts of the country. These studies have afforded a clearer knowledge of the reasons for the different tillage practices. A bulletin on one phase of this subject will be submitted for publication in the near future.		
(27) Methods of eradicating weeds..... 2,575.00	(27) Methods of eradicating weeds.. 3,500.00	(27) Methods of eradicating weeds.. 3,850.00
This work includes a study of the agronomic habits of weeds and of methods of eradicating them, in order to secure and disseminate knowledge that will enable farmers to eradicate the most troublesome weeds on their farms. A detailed study of the habits of Johnson grass, nut grass, wild onion and other weed pests, and of methods of their extermination, is being made.		
<i>Results.</i> —A practical and simple method of controlling Johnson grass has been discovered and is described in Farmers' Bulletin 279. Since the publication of this bulletin it has been found that the dreaded quack grass can be controlled in the same manner. The experiences of many farmers have confirmed the results set forth in this bulletin, and a second publication on the subject is being prepared.		
A bureau circular describing in detail the agronomic habits of the wild onion and suggesting means of control has been issued. A Farmers' Bulletin giving results of investigations on bindweed, or wild morning-glory, has been completed. We are now cooperating with about 150 farmers in studying the relation of weeds including rice-weed pests, Canada thistle, sheep sorrel, orange hawkweed, quack grass, and several other important weeds.		
(28) Manures and fertilizers..... 2,100.00	(28) Manures and fertilizers..... 2,600.00	(28) Manures and fertilizers..... 2,600.00
This project includes a study of farm practice in the production and use of green manures and commercial fertilizers, in order to obtain knowledge of the methods used by successful farmers, and also of the relation between fertilizers and soil types. A study of the respective merits of commercial fertilizers is being made, with a view to advising farmers regarding the value and use of the various fertilizers exploited in their vicinity.		
<i>Results.</i> —As a result of these studies, we are now for the first time in position to make with a fair degree of confidence recommendations concerning the kind and amount of fertilizers advisable for use in growing the principal crops in the South Atlantic States. A very important relation has been shown between the general character of the soil and the amount, both actual and relative, of the various fertilizing ingredients required for best results, especially with cotton. It also appears that fertilizers applied to corn after the crop has made considerable growth may be highly beneficial. In practically all of this region matters of first importance in increasing crop yields and profits, and for securing the maximum benefits from the use of commercial fertilizers, are a systematic rotation of crops in which legumes form a prominent part, deep plowing, and an increase of the humus content of the soil.		
(29) Farm practice in hay production..... 3,037.51	(29) Farm practice in hay production..... 3,700.00	(29) Farm practice in hay production..... 3,800.00
This work consists of a study of farm practices in the production, utilization, and marketing of hay, with the object of improving its quality, cheapening its production, and to encourage hay production in regions which now purchase their supply. The relation between weight and volume of hay is being ascertained, as well as the practicability of buying hay in the stack instead of by the ton.		
<i>Results.</i> —The cause of the losses due to dockage on the markets has been ascertained, and bulletins have been issued giving advice to farmers on this point. It has been shown that hay artificially cured is vastly superior to that cured in the usual way. A kiln for the artificial curing of hay has been devised and will be ready for use next season.		
(30) Cooperative work on farm practice..... 1,700.00	(30) Cooperative work on farm practice..... 2,400.00	(30) Cooperative work on farm practice..... 2,400.00
This work includes a demonstration of the relation of types of farming to soil fertility, in cooperation with the Kentucky Experiment Station; various other farm practice studies and experiments in cooperation with the state stations; and miscellaneous work in Washington, D. C., such as the mapping of the work of the bureau according to congressional districts.		
<i>Results.</i> —Careful records have been made of the yields of a large number of plants at the Kentucky and Maryland experiment stations. The work, however, has not continued long enough to permit conclusions to be drawn. Considerable progress is being made in classifying the work by districts throughout the country.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Special studies of farm practice—Continued.</i>	<i>Special studies of farm practice—Continued.</i>	<i>Special studies of farm practice—Continued.</i>
(31) Cassava investigations..... \$2,300.00 These investigations relate to cassava as a farm crop, with the chief object of securing strains that will reproduce true to seed. The cassava crop to a certain extent replaces corn on stock farms. By propagating this crop from seed instead of cuttings the region to which the crop is adapted may be greatly extended, especially in those sections of the Gulf coast where corn does poorly. <i>Results.</i> —Three strains of cassava which reproduce true to seed have been developed and are now being propagated on a considerable scale. About 75 varieties of cassava have been tested and about 25 have been selected for further testing. All of these produce seed and yield fully as heavily as plants produced from cuttings in the usual way, and yield 15 to 20 tons per acre. By the development of varieties that can be grown from seed the area of profitable cassava culture will be extended much farther north.	(31) Cassava investigations..... \$2,700.00	(31) Cassava investigations..... \$2,700.00
(32) Methods of clearing logged-off land..... 1,200.00 The objects of this work are to ascertain the best methods and the cost of preparing logged-off land for cultivation. All available information is being gathered from those who have done work of this character in the West, and cooperative arrangements have been entered into with the Wisconsin and Minnesota experiment stations for the collection of data on the subject. <i>Results.</i> —A circular has been issued giving a summary of information gathered from those who have had experience in clearing logged-off land. Definite data have been secured from a large number of crews engaged in clearing land. The legislature of the State of Washington at its last session appropriated \$5,000 to be used in these investigations in that State in cooperation with the Bureau of Plant Industry.	(32) Methods of clearing logged-off land..... 3,458.34	(32) Methods of clearing logged-off land..... 3,458.34
<i>Farm economics.</i>	<i>Farm economics.</i>	<i>Farm economics.</i>
(33) Detailed study of farms..... 3,800.00 The objects of this work are to secure a knowledge of the cost of all kinds of farming operations, and of the profits from different crops, classes of live stock, and types of farming; to work out systems of records for farmers and of financial accounting on the farm, as referred to in the next described project; and also to ascertain the equipment required for farms of different sizes and types. Cooperation with the state experiment stations and with farmers is practiced in this work. <i>Results.</i> —Suitable methods of conducting investigations of this kind have been worked out. Much information concerning equipment, the planning of cropping systems, and the cost of agricultural operations has been accumulated, which will be of great aid in advising farmers as to profitable systems of farming. Cooperation with selected farmers is being rapidly extended. Complete farm inventories have been made, and farms surveyed to determine crop acreages and field arrangement. Summaries of statistical data collected are now being made and will be prepared for publication in bulletin form.	(33) Detailed study of farms..... 7,850.00	(33) Detailed study of farms..... 7,850.00
(34) Study of farm accounts and records..... 1,400.00 This project has three distinct objects, viz: (1) to work out methods of collecting reliable data in the study of farm organization; (2) to work out a system for keeping farm financial accounts for farm use; and (3) to work out for farm use a system of cost accounting dealing with labor, equipment, and performance records, together with supplemental records for field crops, etc. The work includes a complete cost accounting of all farm operations. <i>Results.</i> —Methods of collecting farm data have been satisfactorily worked out as pertains to labor records and financial accounts. The system of financial accounts for farmers' use, originated in 1907, has been used on a number of farms to test its practicability. Several changes tending toward improvement have been made in the system. A bulletin on this subject is now in preparation.	(34) Study of farm accounts and records..... 3,400.00	(34) Study of farm accounts and records..... 3,400.00
(35) Study of feeding systems..... 2,400.00 The objects of this work are to secure a knowledge of the amount of feed consumed by different animals during the year, with a view to being in position to plan cropping systems adequately. This work is being conducted chiefly in Indiana and Ohio. <i>Results.</i> —Records of the feeds actually used on twenty-three farms have been secured covering a period of one year. Similar records are now being secured from about forty farmers. Several of the state experiment stations are actively cooperating in this work,	(35) Study of feeding systems..... 4,590.00	(35) Study of feeding systems..... 4,590.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARM-MANAGEMENT INVESTIGATIONS—Continued.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.	FARM-MANAGEMENT INVESTIGATIONS—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Farm economics—Continued.</i>	<i>Farm economics—Continued.</i>	<i>Farm economics—Continued.</i>
(36) Study of farm equipment..... \$2,286.62 This project includes the study of farm buildings, machinery, tools, fences, etc., for farms of different types and sizes. The study of farm buildings has reference to arrangement, annual investment, depreciation, interest, repairs, and total cost annually per head of live stock, bushel of grain, ton of hay, etc. Machinery and implement catalogues are collected and studied, as well as the operation of the machinery on selected farms. <i>Results.</i> —Complete inventories have been made on representative farms in nine of the Central States, ranging from ten to thirty farms in each State. Catalogues from more than one thousand manufacturers of machinery and implements have been assembled and indexed. Special investigations have been made of plowing by the use of mechanical power in some of the Western States. The use of farm tractors and other machinery has been studied, and valuable data have been collected.	(36) Study of farm equipment..... \$2,750.00	(36) Study of farm equipment..... \$2,750.00
(37) Preparation of farm plans..... 2,100.00 This project includes the necessary work connected with the drawing of plans for object-lesson farms and the figuring out of the proper cropping systems to be used thereon. <i>Results.</i> —A large number of farm plans have been drawn. This work is incidental to the other projects, and its value is therefore shown in the progress and results noted under the work in the farm-management districts, etc., previously described.	(37) Preparation of farm plans..... 3,100.00	(37) Preparation of farm plans..... 3,100.00
<i>Range and cactus investigations.</i>	<i>Range and cactus investigations.</i>	<i>Range and cactus investigations.</i>
(38) Cactus investigations..... 3,215.00 This project includes experiments in the planting and cultivation of edible species of cacti, careful observations of their growth, and the determination of their feeding value. The value of the prickly pear and other species as food for stock is being studied, and experiments in the improvement of species by selection are also being conducted. <i>Results.</i> —In southern Texas it has been shown that the prickly pear is the best insurance against famine that the farmer who raises cattle can have. It makes good roughage for cattle, sheep, and swine, as well as excellent succulent feed for the dairy at all seasons. Evidence secured during the past year demonstrates that prickly pear well cultivated will seldom, if ever, suffer from drought in southern Texas. Uncultivated pear, on the contrary, often does. During the past year two spineless species have been secured which withstood the temperatures at San Antonio during the past winter. One of these is a cultivated species and the other a selected native. Nearly 10 tons of cuttings of spineless varieties have been distributed to the less frosty sections of the country where there is a probability of their success. The demand for these cuttings has exceeded the supply. A bulletin on "Spineless Prickly Pears" has been issued during the past year. Other publications on the value of various species of cacti, both as food for man and stock, have been issued and distributed.	(38) Cactus investigations..... 5,130.00	(38) Cactus investigations..... 5,920.00
(39) Range investigations..... 2,604.50 This project covers the study of the care and capacity of the stock ranges of the West and the practices of their management, with a view to ascertaining the best methods of securing the greatest profit from the ranges, particularly in Arizona, where the native pastures are badly devastated. The work is conducted in cooperation with the owners of the ranges. <i>Results.</i> —Publications have been prepared giving the results of these investigations. Methods for building up depleted range and native pastures have been worked out and put into operation on various ranges in the West. Much of this work has been conducted on the Santa Rita National Forest, in cooperation with the Arizona Agricultural Experiment Station.	(39) Range investigations..... 3,355.00	(39) Range investigations..... 3,445.00
FARMERS' COOPERATIVE DEMONSTRATION WORK.	FARMERS' COOPERATIVE DEMONSTRATION WORK.	FARMERS' COOPERATIVE DEMONSTRATION WORK.
(Seaman A. Knapp, special agent in charge.)	(Seaman A. Knapp, special agent in charge.)	(Seaman A. Knapp, special agent in charge.)
Salaries, statutory..... \$1,370.00	Salaries, statutory..... \$4,440.00	Salaries, statutory..... \$14,260.00
Salaries, lump-fund..... 85,803.19	Salaries, lump-fund..... 151,635.00	Salaries, lump-fund..... 165,367.10
Miscellaneous expenses and supplies..... 20,083.69	Miscellaneous expenses and supplies..... 14,849.93	Miscellaneous expenses and supplies..... 8,387.35
Traveling and field expenses..... 18,450.80	Traveling and field expenses..... 35,395.00	Traveling and field expenses..... 40,090.55
Total..... 125,712.68	Total..... 206,319.93	Total..... 225,015.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) General administrative and supervisory work..... \$27,562.63 This project includes the general office expenses connected with the demonstration work; the general supervision of the work by the special agent in charge and a corps of general agents; and similar necessary administrative expenses incident to the field work. <i>Results.</i> —The centralization of the administrative phases of the work in Washington, D. C., has served greatly to increase the efficiency of the work as a whole, and a great saving of expense has been effected by the adoption of the best business methods in carrying on the work. The results under this project are reflected in the progress and results noted under all of the other projects, described in the following paragraphs.	(1) General administrative and supervisory work..... \$35,819.93	(1) General administrative and supervisory work..... \$39,515.00
(2) Demonstration work in east Texas..... 22,512.00 This work, which was inaugurated in 1904 on a small scale, has for its objects the encouragement of the diversification of crops, the improvement of cultural methods, and the general amelioration of farm conditions in the sections invaded by the cotton boll weevil or those threatened with invasion by that pest. It has been found by experience in conducting the Farmers' Cooperative Demonstration Work that upon the invasion of the boll weevil three things will generally occur in the section of country invaded. (1) There will be a general belief that cotton can not be produced under boll weevil conditions. Public opinion takes on extreme pessimism, with the effect of so discouraging the farmers and their tenants that a much smaller amount of work is accomplished and all the work is done in a half-hearted way. To this fact alone is due the loss of probably 25 or 30 per cent in value of the crop produced by any community or county. (2) As all the crops have formerly been made upon the system of securing advances from merchants or bankers, the moment that it is certain that the boll weevil is about to invade the county these advances are either wholly or largely withdrawn, rendering it impossible to continue the cultivation of the soil as formerly because labor can not be paid. (3) As soon as the two conditions described prevail a large proportion of the tenants abandon their farms and a still larger percentage of the labor leaves the county. To counteract these influences it is necessary that some well organized and forceful body, such as the Farmers' Cooperative Demonstration Work, should enter the county. In all of this work the people are reached largely through personal contact with the representatives of the department. <i>Results.</i> —This general propaganda work has met with great and continued success. It has been proved by repeated tests in many counties that pessimism may be counteracted and public confidence restored in a large degree by citing examples of success among farmers in other sections and by organizing the people to restore hopefulness and confidence. The bankers and merchants are requested, as a matter of loyalty, to make some advances for the production of crops, but are advised to be as prudent as possible. On the other hand, the farmers are taught to be self-reliant and independent, because in all the South they can produce their own food supplies with very little expenditure of money by having summer and winter gardens. This has induced such economy that when at the end of the season the people find that they have larger crops, in many cases, than they had prior to the advent of the weevil they have been amazed at the net income for the year and the community has been left in a better financial condition than ever before. This restoration of prosperity has been of extraordinary advantage to the communities where our work has been conducted. As the people accumulate means, the general processes of rural uplift are rapidly organized—the better school and the better home, the better church, the better highways. Farmers cooperate, as they have money, to buy to better advantage and to sell to better advantage. Finally, the effect of this work has been greatly to arouse and enthuse the people as a whole in the States of the South where it has been conducted.	(2) Demonstration work in east Texas..... 26,000.00	(2) Demonstration work in east Texas..... 23,000.00
(3) Demonstration work in west Texas..... 12,500.12 This work is essentially similar to that in east Texas, just described, with such modifications as the conditions of the territory demand. Over a large part of central and western Texas excessive and protracted droughts occur, in a measure complicating the cotton boll weevil situation. <i>Results.</i> —The result of the work in western and central Texas have been similar to those achieved in eastern Texas, previously described. In addition, our advice regarding deep plowing and better preparation of the soil, and the distribution of seeds of increased drought resistance, have been of signal value to the territory.	(3) Demonstration work in west Texas..... 21,000.00	(3) Demonstration work in west Texas..... 24,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Demonstration work in Oklahoma..... \$11,557.04 This work is essentially similar to that in east Texas previously described, but has special reference to the conditions existing in Oklahoma. In the eastern part of the State the lands are mainly owned by the Indians and the farms are nearly all leased to tenants at an annual rental. As a consequence, it is difficult to bring the best class of tenants into the region and the conditions tend very slightly toward progress. The western portion of the State, on the other hand, is occupied by a very enterprising class of men, and they are very much interested in improving their conditions. <i>Results.</i> —While the work has not been conducted very long in this territory, the results have been quite similar to those in east Texas, previously described. The people in Oklahoma are more optimistic, and hence there has not been that universal depression found in other States. In western Oklahoma the farmers have been induced to use better seeds and better cultural methods. The settlement of these sections has been so recent that very few of the farmers understand their climate and the best methods of handling the soils.	(4) Demonstration work in Oklahoma..... \$19,000.00	(4) Demonstration work in Oklahoma..... \$20,000.00
(5) Demonstration work in Louisiana..... 20,401.59 This work is essentially similar to that in east Texas, previously described, but has special reference to the conditions existing in Louisiana, which are rather peculiar. This is a section where the main cotton lands, and especially the alluvial lands, are subject to much heavier rainfall than those of east Texas. Furthermore, the class of people is quite different. A large portion of the territory is farmed by the Acadian population, and it has been necessary to secure agents who understand the French language, and to organize with great care in order to reach every community. We have also found it necessary to insist upon a greater diversification of crops, since cotton has always been a rather uncertain plant under such humid conditions. There have been years of partial failure in the history of cotton production in Louisiana. <i>Results.</i> —Our success in Louisiana in achieving results that relieve the people from depression has been possibly more signal than in Texas. Great credit is due to the intelligence of the farmers and to the bankers, merchants, and public officers for cooperating in every respect. We believe that we have the situation in Louisiana partially under control. The results in general have been similar to those achieved in east Texas, previously described.	(5) Demonstration work in Louisiana..... 32,500.00	(5) Demonstration work in Louisiana..... 30,000.00
(6) Demonstration work in Arkansas..... 14,782.26 This work is essentially similar to that in east Texas, previously described, but has special reference to the peculiar conditions that prevail in Arkansas. In this State it has been necessary to place special emphasis on better preparation of the soil, better seed selection, and better cultivation of the crop, and to encourage the farmer toward improved cultural methods. There seemed to be throughout the State a great laxity of public opinion with reference to these important items. <i>Results.</i> —The results in Arkansas have been very favorable in every instance—perhaps as much so as in any other State—due to the active cooperation and support of the governor and public-spirited citizens.	(6) Demonstration work in Arkansas..... 23,500.00	(6) Demonstration work in Arkansas..... 25,000.00
(7) Demonstration work in Mississippi..... 16,397.04 This work is essentially similar to that in east Texas, previously described, but has special reference to the peculiar conditions prevailing in Mississippi. The nine delta counties of the Yazoo and Mississippi present a most unique condition, because they are mainly owned by large farmers and are almost solidly worked by negro labor. It required special organization to influence this condition, which threatened to have all the worst results of depression and loss of confidence described in the east Texas situation. Furthermore, owing to the fact that few of the large farmers reside upon their farms, it was more difficult to handle the situation. It has been necessary to employ men of large experience, and at great expense, in these counties, but this condition has been successfully met through the cooperation of the counties, which in many cases have furnished a large part of the funds necessary. <i>Results.</i> —The results in Mississippi have been very satisfactory, not only to the department but to all the people who have been in touch with the work. While the work is not finished, owing to the fact that the boll weevil has invaded only a portion of the counties, we have achieved a success which has done much to restore public confidence. All of the work is conducted along the same lines and has brought about the same general results as previously outlined in the east Texas movement.	(7) Demonstration work in Mississippi..... 26,500.00	(7) Demonstration work in Mississippi..... 26,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.	FARMERS' COOPERATIVE DEMONSTRATION WORK—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(8) Demonstration work in Alabama..... \$22,000.00	(8) Demonstration work in Alabama..... \$25,000.00
	This work is conducted along the same general lines as that in east Texas, previously described, but has special reference to the introduction of improved seed and the best methods of agriculture, in order to prepare the people in advance for the invasion of the boll weevil.	
	<i>Results.</i> —The work in Alabama, though only recently begun, has yielded results equally as satisfactory as those achieved in the other States, previously described. Wherever the people have followed our plans they have been rewarded with good crops. In this State work has been especially undertaken with the negroes with successful results. They have seemed to apprehend plans and were able to carry out the instructions as well as the whites.	
		(9) Demonstration work in Tennessee..... 15,000.00
		This work will be conducted along the same general lines as that in the other Southern States, with special reference to the conditions existing in western Tennessee, i. e., the portion of the State west of the Tennessee River, which is mainly a cotton-producing section. The object will be to prepare the people for the invasion of the boll weevil, by teaching them better cultural methods, the use of early maturing cotton varieties, and the diversification of crops.
ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS.
(L. C. Corbett, horticulturist in charge.)	(L. C. Corbett, horticulturist in charge.)	(L. C. Corbett, horticulturist in charge.)
Salaries, statutory..... \$7,850.00	Salaries, statutory..... \$11,220.00	Salaries, statutory..... \$12,660.00
Salaries, lump fund..... 28,253.39	Salaries, lump fund..... 33,198.00	Salaries, lump fund..... 32,250.00
Miscellaneous expenses and supplies..... 8,089.58	Miscellaneous expenses and supplies..... 5,372.00	Miscellaneous expenses and supplies..... 4,500.00
Travelling and field expenses..... 3,062.03	Travelling and field expenses..... 4,600.00	Travelling and field expenses..... 4,680.00
Total..... 47,255.00	Total..... 54,390.00	Total..... 54,090.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Arlington (Va.) Experimental Farm..... 22,055.00	(1) Arlington (Va.) Experimental Farm..... 18,860.00	(1) Arlington (Va.) Experimental Farm..... 19,840.00
This farm consists of 500 acres, and is the field laboratory for the various bureaus and offices of the department. It is equipped with buildings, teams, tools, etc., for carrying on experiments. The object of the farm is to provide horticultural collections which will aid investigators in those lines, as well as to afford opportunity for field experiments with a wide variety of plants adapted to this latitude.		
<i>Results.</i> —The usefulness of the Arlington Experimental Farm to the bureau and to the department as a whole increases each year. The productiveness of the soil on the farm has been greatly improved as a result of tile draining and the plowing under of leguminous and other crops for green manure. Not only has crop production been increased thereby, but the physical condition of the soil has been modified so that it is less affected by excessive rains or by drought than formerly. It is now possible to cultivate during seasons which prior to the establishment of these improved practices precluded all crop production.		
The development of the farm has demonstrated the improvement possible in the lands of the coastal plain of the United States, and has provided a place within easy reach of Washington, D. C., where the department investigators can carry on field research. A wide variety of cultural tests, as well as breeding and selection work is now being carried on at Arlington by many offices of this and of other bureaus.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(2) Experiments in the forcing of plants..... \$3,000.00 This work consists of a study of the conditions favoring the forcing of plants grown under glass. Careful studies are being made of the quantitative relations existing between the rate of growth, periodicity of growth, and transpiration in various economic plants, with a view to using plants as interpreters of climatic conditions in the open, as well as to determine the adaptability of plants to various environments. The main object is to secure definite information on the quantitative relations existing between heat, light, and moisture in the growth of economic plants, and to determine the conditions of environment which should be maintained by commercial florists to secure a maximum development in the various crops grown under glass. <i>Results.</i> —Good progress is being made in these investigations, but it is still too early to draw definite conclusions. The indications are that the adaptation of plants to severe winter conditions or to trying arid conditions can be foretold by laboratory studies. It is also believed that by the use of flowering wood for propagating purposes the yield of flowers from greenhouse roses can be materially increased; also that the profits from carnations can be decidedly increased by using only plants producing a large number of flowers as mother plants. Some work in the forcing and fertilization of lettuce has also yielded important facts.	(2) Experiments in the forcing of plants..... \$6,280.00	(2) Experiments in the forcing of plants..... \$5,000.00
(3) Truck crop survey..... 5,500.00 This work consists of special studies of the distribution, season of maturity, time of planting, and methods of marketing cabbage, celery, onions, potatoes, and many other truck crops. The objects are the collection of data showing the acreage planted, the time of planting, and the condition of the crops in the various crop zones at stated intervals. This information will aid in recommending the acreage to be planted of any particular crop in any given crop zone. The condition in which various shipments of truck arrive at the markets is also being studied, with a view to the improvement of methods of marketing. <i>Results.</i> —These studies have made possible the publication of Farmers' Bulletins on tomatoes, cucumbers, beans, celery, onions, peanuts, strawberries, raspberries, okra, and on the home vegetable garden. Bulletins on other crops are in preparation. Maps showing the approximate zones for various crops have been compiled; and a great quantity of data regarding truck practices, time of planting, harvesting, as well as systems of marketing, has been secured. The survey work brings to light the important problems connected with the trucking industry in each of the several regions, thus furnishing a guide for future investigations. Cooperative marketing organizations in the truck industry have been studied during the past year, and many highly successful cooperative agencies of this kind have come under observation. One of the most promising tendencies of the day is the spirit of cooperation and mutual helpfulness which is beginning to manifest itself among the producers of truck crops. The successful organization and working of cooperative marketing companies or exchanges by farmers has proved the possibility as well as the desirability of a system of marketing which shall have headquarters at the point of production.	(3) Truck crop survey..... 3,120.00	(3) Truck crop survey..... 4,000.00
(4) Potato tests and investigations..... 1,500.00 This work is a continuation of the variety trials inaugurated in 1903 of both European and American varieties of potatoes, and includes the selection of seed potatoes from the most productive hills of standard varieties for the purpose of securing strains of potatoes which will increase the yield per acre in the various potato-growing districts. This work is conducted on the Arlington Farm, and also in a number of States in cooperation with the experiment stations. <i>Results.</i> —Recent cultural studies of potatoes have disclosed the fact that certain varieties possess greater drought-resisting powers than others. Information has also been secured on the comparative value of American and European varieties as regards yield and disease resistance. A bulletin on the cultivation of Irish potatoes has been published and distributed. The information secured in a three-year test of 70 varieties in five States is being used as the basis for selection work to develop strains especially adapted to the various potato sections and possessing increased productive power. The average yield of potatoes in this country is far below what it is in European countries, and also far below what our best growers believe is possible. It is believed that the income from the potato crop can be materially augmented by the selection and adaptation of varieties.	(4) Potato tests and investigations. 3,450.00	(4) Potato tests and investigations. 4,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ARLINGTON HORTICULTURAL FARM AND EXPERIMENTAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(5) Sweet potato investigations..... \$1,500.00 This work consists of a comparative study of both new and tried varieties of sweet potatoes, with reference to time and method of planting, time and manner of harvesting and curing, and a study of the changes which take place during the curing and storage periods. Data as to the best time of placing the crop upon the market are also being collected. A secondary feature of the work is a study of the possibility of producing a standard stock food from desiccated sweet potatoes. <i>Results.</i> —During the past year very material progress has been made in the work with varieties of sweet potatoes, especially in the matter of introducing standard sorts in localities where they have not been previously grown. Observations as to the comparative yield of varieties and the various problems connected with the storage of sweet potatoes for winter marketing have been made. An investigation of the commercial production of sweet potatoes has been completed, and the results published in a Farmers' Bulletin.	(5) Sweet potato investigations..... \$1,010.00	(5) Sweet potato investigations.... \$1,010.00
(6) Peanut investigations..... 1,200.00 The objects of this work are to encourage the growing of peanuts both as human food and stock food. Extensive varietal plantings have been made, and a careful study of the industry is under way, with the idea of introducing improved machinery which will lessen the cost of producing the crop. Special attention is being given to the extension of the industry into the cotton States, with a view to the development in that region of a crop which will be the means of maintaining live stock. Some attention is also being given to the study of methods of producing peanut oil. <i>Results.</i> —A rapid extension is taking place in the culture of peanuts and the indications are that the crop is to play an important part in the farm practice of the Southwest in the way of a stock food. The plant is the only one known which produces a perfectly balanced ration for a dairy cow. The value and importance of this crop justify large expenditures for the encouragement of its culture through the Southern States. A bulletin on peanut culture has been issued, covering methods of growing, harvesting, and marketing the crop. Imported varieties of peanuts from various parts of the world, including the famous peanut regions of the Gold Coast of Africa, have been grown and compared with varieties now growing in this country. An experiment has been inaugurated to determine the commercial possibilities of the production of peanut oil in the United States. The crop grown the second year from one variety of imported seed showed an oil content of nearly 54 per cent, which is considerably above the average found in American nuts. Investigations and tests of machinery required in the manufacture of oil from peanuts have been begun, and both oil mill owners and farmers in the boll weevil districts of Louisiana and Texas, where soil conditions are favorable to the peanut, have been encouraged to undertake extensive experiments in peanut-oil production.	(6) Peanut investigations..... 1,580.00	(6) Peanut investigations..... 2,500.00
(7) Onion investigations..... 1,000.00 This work is concerned both with the Bermuda onion industry of the Southwest, with a view to its extension and the improvement of the seed supply, and also with onion growing in the North Atlantic and Lake States, including the production of seed and sets, as well as methods of cultivating, storing, and marketing the crop. The objects of the work are the improvement and extension of the onion industry. <i>Results.</i> —During the past year this bureau has secured through the State Department a quantity of seed of the genuine Denia, or Spanish onion. This seed has been distributed to reliable experimenters, several of whom have produced onions that are equal or superior to those that are imported in large quantities. Special attention has been given to the production of onion seed and sets from a farm standpoint, and a bulletin on this subject has been prepared. Cultural directions for the production of Bermuda onions in the Southwest can now be supplied to growers as a result of these investigations. This is a new industry but one of great value to the territory in which it can be carried on.	(7) Onion investigations..... 1,015.00	(7) Onion investigations..... 1,015.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(8) Miscellaneous horticultural investigations..... \$3,765.00 This work includes various studies of truck-crop problems, such as the field and market conditions for water-melons and muskmelons, with special reference to conditions determining quality in the product as well as field practices which aid in the control of diseases; the commercial culture of horse-radish and water cress, including methods of growing, propagating, and marketing these crops under American conditions; cooperative studies of the possibilities of bulb growing in America, including Dutch bulbs, callas, Easter lillies, tuberose, and other bulbous plants; school garden work in cooperation with school authorities throughout the country, with the object of stimulating a love for nature in every American child; and various other matters pertaining to the production of truck or garden crops. <i>Results.</i> —Good progress is being made in the development of improved cultural practices which will increase the profits to be derived from the growing of melons, horse-radish, water cress, and other crops, as well as in the introduction of improved strains which will resist disease, give greater yields, etc. As a result of the instruction given in school gardening a greater respect for agriculture and love of nature is rapidly developing in our schools in all parts of the country. The department has actively cooperated in this movement, which has a great bearing on the future farm life of the country. Seed has been distributed to schools as far as possible, more than 10,000 school gardens having been reached as a result of the past year's distribution. This work stimulates an interest in horticultural pursuits and develops a respect and love for flowers and plants and for the beautiful in nature. The growing demand for seeds and information for this work indicates its value and popularity. Bulletins on school gardening have been issued by the department and distributed to schools. Good progress is being made in the development of an American bulb industry, in cooperation with other offices of the bureau.	(8) Miscellaneous horticultural investigations..... \$5,590.00	(8) Miscellaneous horticultural investigations..... \$1,100.00
(9) Demonstration work in horticulture..... 1,000.00 This project covers all horticultural work not classed as experimental or research. It consists of the giving of information and assistance to truck growers in such matters as planting plans for gardens, truck farms, and ornamental grounds; and also the preparation of popular publications and the dissemination of information by correspondence. Field demonstrations of improved horticultural practices are also included under this project. <i>Results.</i> —This work is bringing about a better understanding of horticultural problems and practices, more economical methods of cultivating, harvesting, and marketing truck crops, especially in methods of packing special crops. Demonstrations of improved practices, with reference both to better yields and to the control of diseases, have been conducted with success in various sections, the latter phase in cooperation with other offices of the Bureau of Plant Industry. Much of this work is incidental to the other horticultural projects, previously described.	(9) Demonstration work in horticulture..... 1,835.00	(9) Demonstration work in horticulture..... 4,165.00
(10) Nutrition investigations with truck crops..... 1,435.00 The object of these investigations is to determine the fertilizers best suited for the production of the several important commercial truck crops of the United States; to determine the profitable use of fertilizers as indicated by crop yields and soil improvement; and to ascertain the best crop rotations for improving the physical as well as the crop-producing powers of the soils of the trucking area of the United States. The problems of plant nutrition are among those of most vital importance to the truck farmers and intensive gardeners of the country. <i>Results.</i> —As a result of the investigations already made in the Norfolk, Va., area a number of the most progressive truck growers are using cowpeas extensively following early truck crops, to be turned under as a means of increasing the humus content of the soil. This practice is rapidly correcting many of the evils of a system of farming long conducted on the basis of commercial fertilizers minus humus—a ruinous system. A rotation which combines commercial fertilizers with humus either in the form of manure or a green crop turned under is bound to improve crop yields and lessen nutrition troubles. The work has progressed far enough to warrant this statement, but the best rotation and the most economical combination of nutrition for each particular crop and locality are yet to be determined.	(10) Nutrition investigations with truck crops..... 1,515.00	(10) Nutrition investigations with truck crops..... 1,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.	ARLINGTON EXPERIMENTAL FARM AND HORTICULTURAL INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(11) Vegetable and flower seed testing..... \$5,000.00 This work includes the testing of samples of all seed used in the congressional distribution, together with the novelties offered by the seed trade, and also a study of special groups of vegetables for the purpose of determining varietal distributions and the practical value of the respective sorts. The objects are to classify the varieties of vegetables so as to show synonyms and to simplify the nomenclature; and to breed new and distinct types of standard varieties with qualities or character fitting them to particular commercial requirements. The work has an additional object of determining the purity and germinating power of the seeds secured for distribution. <i>Results.</i> —The testing of some 1,200 so-called distinct varieties of vegetables during the past year has shown that in a great many cases seedsmen send out under distinct varietal names stocks whose only difference is the degree to which they are uniformly of the same varietal character, and that the use of different varietal names to distinguish what are in reality simply different grades or strains of the same sort is a very common practice of even our best and most reliable seed firms. Tests of the seeds used in the congressional seed distribution have shown that they are quite equal in varietal character to those commonly used by seedsmen for their retail trade.	(11) Vegetable and flower seed testing..... \$9,035.00	(11) Vegetable and flower seed testing..... \$8,260.00
(12) Cooperative work on fruit varieties..... 300.00 This project includes the fruit collections maintained on the Arlington Experimental Farm in cooperation with the Office of Pomological Collections; and also cooperative work with the Office of Field Investigations in Pomology in the securing of varieties of fruit and ornamental trees for use at the ranger stations in the national forests. The fruit collections are as nearly as possible an authentic type collection of varieties, comprising some 300 sorts of peaches and more than 500 sorts of apples. <i>Results.</i> —This work has afforded opportunities for comparing the habits of growth of the different varieties under orchard conditions, and also a source from which to secure for propagation wood true to name. Fruit for systematic study, comparison, and description has also been made available through these collections.	(12) Cooperative work on fruit varieties..... 1,100.00	(12) Cooperative work on fruit varieties..... 1,200.00
POMOLOGICAL COLLECTIONS. (G. B. Brackett, pomologist in charge.)	POMOLOGICAL COLLECTIONS. (G. B. Brackett, pomologist in charge.)	POMOLOGICAL COLLECTIONS. (G. B. Brackett, pomologist in charge.)
Salaries, statutory..... \$10,075.33 Salaries, lump fund..... 6,405.00 Miscellaneous expenses and supplies..... 462.40 Traveling and field expenses..... 100.95 Total..... 17,043.68	Salaries, statutory..... \$8,560.00 Salaries, lump fund..... 7,700.00 Miscellaneous expenses and supplies..... 704.00 Traveling and field expenses..... 200.00 Total..... 17,164.00	Salaries, statutory..... \$9,580.00 Salaries, lump fund..... 6,680.00 Miscellaneous expenses and supplies..... 679.00 Traveling and field expenses..... 200.00 Total..... 17,139.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Office work and care of collections..... 4,293.68 This project includes the routine work connected with the maintenance of the pomological collections, the securing, by correspondence and otherwise, of data as to the culture and care of orchards and the selection of varieties for planting, and all other details necessary in carrying out the work. The object is the general dissemination of knowledge on the various subjects pertaining to fruit culture. <i>Results.</i> —Through this work it is possible to give advice to correspondents and others on the selection of orchard sites, the varieties most likely to succeed in their sections, and numerous other matters relating to the culture of orchard and other fruits. The collections serve as a basis for the fruit investigations of the bureau, and their value is therefore reflected in the progress noted under all of the other projects described in the following paragraphs.	(1) Office work and care of collections..... 4,306.08	(1) Office work and care of collections..... 4,281.08
(2) Identification and description of fruits..... 3,225.00 This work consists of the identification of samples of fruits submitted by correspondents, the state experiment stations, and others, and the furnishing of detailed descriptions of the different commercial varieties of fruits. The object is to aid fruit growers in establishing the identity of the varieties grown by them wherever there may be any doubt in that respect. <i>Results.</i> —A great number of samples of fruit varieties have been examined, identified, and described, and much valuable information has been collected and disseminated by means of this work. During the past fiscal year 2,725 packages of fruit were received, of which 947 varieties were for identification. Many of these were found to be promising new fruits which may prove of considerable value. Descriptions of 601 varieties have been made during the year, and 547 pomological specimens were added to the collections as a result of this work.	(2) Identification and description of fruits..... 3,226.00	(2) Identification and description of fruits..... 3,226.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
POMOLOGICAL COLLECTIONS—Continued.	POMOLOGICAL COLLECTIONS—Continued.	POMOLOGICAL COLLECTIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(3) Simplification of fruit nomenclature..... \$1,850.00 The objects of this work are to bring about a revision and simplification in the nomenclature of our principal fruits in order to prevent the losses experienced by orchardists through the commercial use of different names for the same variety in various parts of the country, and to aid in the establishment of fruit culture and nursery work on a stable basis as to its terminology. This work is the necessary basis of systematic pomology. <i>Results.</i> —A great deal has been done toward the purification of the nomenclature of several classes of fruits, notably the apple, pear, and peach. An exhaustive bulletin on the Nomenclature of the Apple, and a similar one on the Pear, are now widely used by pomological workers and have received high commendation. A bulletin on the nomenclature of the peach is well under way, being the third of this series. During the past year considerable attention has been paid to the correcting of erroneous names of fruits. A third revision has been made of the Catalogue of Fruits, originally published several years ago. This catalogue consists of a list of fruits recommended for planting in various sections, and is the result of about 2,000 inquiries sent out to practical fruit growers who have tested these fruits in the various fruit districts of the country.	(3) Simplification of fruit nomenclature..... \$1,838.00	(3) Simplification of fruit nomenclature..... \$1,838.00
(4) Modeling and painting of fruits..... 4,400.00 This work consists of the preparation of models and paintings of fruits both for the use of the department and the state experiment stations cooperating with it in fruit work. The objects are to preserve an authentic collection of models and paintings of fruit varieties for use in illustrating publications and in carrying on the various fruit investigations of the bureau. <i>Results.</i> —Many reproductions of fruits, especially of rare and little known varieties, by means of wax and water colors have been made, and duplicate models have been furnished to the state experiment stations and to others interested in orchard work. These reproductions have assisted in the correction of nomenclature, the illustrating of publications, and other phases of the work. During the past year 444 paintings and 106 models were made and placed on record.	(4) Modeling and painting of fruits. 4,480.00	(4) Modeling and painting of fruits. 4,480.00
(5) Studies of various fruit problems..... 3,275.00 This project includes the cooperative testing of fruit varieties on the Arlington Experimental Farm, studies of varieties of plums, cherries, pears, peaches, and various nut crops, such as the hickory and the Persian walnut, and various other problems. The objects are to determine varietal adaptability, to extend the area of fruit culture, and to secure varieties which will resist cold and disease. <i>Results.</i> —More than 600 varieties of fruits are now on trial on the testing grounds, and it has been possible by means of this experimental orchard to clear up the identity of a number of sorts and to advise fruit growers as to the best varieties to plant. A number of promising varieties have been distributed for trial.	(5) Studies of various fruit problems..... 3,313.92	(5) Studies of various fruit problems..... 3,313.92
FIELD INVESTIGATIONS IN POMOLOGY. (William A. Taylor and G. Harold Powell, pomologists in charge.)	FIELD INVESTIGATIONS IN POMOLOGY. (William A. Taylor and G. Harold Powell, pomologists in charge.)	FIELD INVESTIGATIONS IN POMOLOGY. (William A. Taylor and G. Harold Powell, pomologists in charge.)
Salaries, statutory..... \$5,269.67 Salaries, lump-fund..... 29,352.99 Miscellaneous expenses and supplies..... 11,598.74 Traveling and field expenses..... 16,743.00 Total..... 62,964.40	Salaries, statutory..... \$6,120.00 Salaries, lump-fund..... 32,469.34 Miscellaneous expenses and supplies..... 19,176.66 Traveling and field expenses..... 17,790.00 Total..... 75,556.00	Salaries, statutory..... \$6,120.00 Salaries, lump fund..... 33,500.00 Miscellaneous expenses and supplies..... 17,636.00 Traveling and field expenses..... 18,000.00 Total..... 75,256.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) Administrative and supervisory work..... 9,216.28 This project includes the general planning and supervision of the field investigations; the office work and correspondence, and all other necessary details connected with the various projects. <i>Results.</i> —The results under this project are reflected in the progress noted under all of the other projects, described in the following paragraphs.	(1) Administrative and supervisory work..... 9,432.12	(1) Administrative and supervisory work..... 9,132.12

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Fruit marketing.</i>	<i>Fruit marketing.</i>	<i>Fruit marketing.</i>
(2) Experimental export shipments of fruits..... \$3,773.12	(2) Experimental export shipments of fruits..... \$3,109.00	(2) Experimental export shipments of fruits..... \$3,109.00
<p>This work has for its objects the development of an export trade in peaches, summer and winter apples, pomelos, and pineapples, and the determination of the keeping qualities of these fruits in ocean transit, in order to insure their delivery to consumers in attractive, sound, and wholesome condition. An effort is being made to ascertain the relation of varieties, packages, methods of packing, etc., to the requirements of long-distance shipment.</p> <p><i>Results.</i>—An excellent European demand for American pears and other fruits has been created as a result of this work. Considerable shipments of oranges to British markets have been made, and a study of the best methods of packing and shipping these fruits has yielded a great quantity of valuable data. The importance of determining the best methods of exporting surplus fruits in years of full crops becomes annually more evident, and fruit growers show increasing interest in the work. More exact data regarding conditions in foreign markets are greatly needed. A study of cooperative marketing organizations, both in this country and abroad, is being made.</p>		
(3) Apple marketing investigations..... 2,800.00	(3) Apple marketing investigations. 3,000.00	(3) Apple marketing investigations. 3,000.00
<p>This work is conducted in the eastern apple districts in connection with both domestic and export shipment, the objects being to secure uniformity in packages and grade standards; to improve the carrying quality, durability, attractiveness, and wholesomeness of market fruits, and to bring about cooperative methods of marketing the fruit, which will increase the profit to the grower and place the fruit on the market at the proper time. The work has reference both to summer and winter apples.</p> <p><i>Results.</i>—Apple-packing tests under careful observation have shown that with the methods generally practiced a considerable proportion of the losses of apples in transit are traceable to the orchard and packing operations. While the foreign demand for American apples continues strong, lack of uniformity in size of package and entire lack of uniformity in grade standards is operating against the market reputation of the apples of the United States in foreign markets, in contrast with the uniformly graded and branded fruit of Canada, which is subjected to government inspection.</p> <p>The need of uniformity in packages and in grade standards becomes annually more conspicuous in the apple trade and is receiving more careful consideration than ever before by organizations of growers and dealers in various parts of the country. An important movement toward the cooperative marketing of the crop in the principal eastern apple districts is taking place, and has already shown a distinctly beneficial effect upon prices and markets.</p>		
<i>Fruit transportation and storage.</i>	<i>Fruit transportation and storage.</i>	<i>Fruit transportation and storage.</i>
(4) Improvement of methods of packing and shipping citrus fruits in California..... 8,600.00	(4) Improvement of methods of packing and shipping citrus fruits in California..... 10,050.00	(4) Improvement of methods of packing and shipping citrus fruits in California..... 10,050.00
<p>This project includes the study of the causes of decay of oranges, lemons, pomelos, etc., in the packing house and in transit; of the methods used in the groves in picking and handling the fruit; of the keeping quality in the market of fruit handled under different conditions; and of the conditions of transcontinental shipment of citrus fruits. The objects are to prevent the losses resulting from improper handling and decay, and therefore to increase the profit derived from the California citrus industry.</p> <p><i>Results.</i>—When this work was undertaken the losses from decay of citrus fruits while in transit from California were estimated at more than a million dollars annually. The decays were found to result from improper methods of handling the fruit in the groves and packing houses, causing it to be bruised and thereby made susceptible to rot. The decay was also due to lack of fumigation in the groves and to the slow cooling of the fruit in the cars.</p> <p>As a result of the work, the methods of labor and the packing-house equipment and methods have been modified and simplified; there has been greater fumigation in the groves, and the conditions of transcontinental shipment have been greatly improved; the losses have been reduced to a minimum, and it is estimated by the shippers of California that the work has saved a million dollars annually to the industry. The work on oranges has been completed, and attention is now being given to the lemon industry, which has already resulted in better methods of handling and the reduction of decay.</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIELD INVESTIGATIONS IN POMOLOGY—Continued. PROJECTS—continued. <i>Fruit transportation and storage—Continued.</i>	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd. PROJECTS—continued. <i>Fruit transportation and storage—Continued.</i>	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd. PROJECTS—continued. <i>Fruit transportation and storage—Continued.</i>
(5) Improvement of methods of packing and shipping citrus fruits in Florida..... \$4,800.00 This project consists of the application to the Florida citrus industry of the methods put into operation with success in California, just described. The work is practically similar in every detail to that in California, but is of more recent undertaking. The losses from decay in oranges while in transit from Florida are relatively heavier than in California, and the objects of the work are to ascertain and correct the causes of these losses. <i>Results.</i> —This work has shown that the heavy losses in Florida oranges can be reduced by more careful methods of handling. During the past winter a delegation of 40 Florida citrus growers or warehousemen visited California, in company with an expert of this department, for the purpose of studying the influence of the bureau's work upon the industry in California. As a result of their observations and of the work of the bureau in Florida, a rapid remodeling of the Florida packing houses and equipment is taking place and better handling methods are being put into operation. A circular of information has been issued for the use of Florida orange growers.	(5) Improvement of methods of packing and shipping citrus fruits in Florida..... \$5,240.00	(5) Improvement of methods of packing and shipping citrus fruits in Florida..... \$5,240.00
(6) Improvement of methods of packing and shipping grapes in California..... 1,500.00 This work has been begun during the past year, and consists of a study of the influence of the methods of handling grapes in the fields and in the packing houses on the decay and deterioration of the fruit while in transit. The objects are to improve the methods of handling the grape in California and to devise methods by which the rapidly increasing crop can be distributed over wider areas and over a longer period of time. <i>Results.</i> —The results of the first season's work have shown that mechanical injury is at the bottom of most of the decay; that sound grapes decay less, and that the use of a filler in the package, such as cork or redwood sawdust, improves the shipping and keeping quality. Ten carloads of grapes, in which part of the fruit in each car was handled in different ways in California, packed in different ways, and shipped at different periods after packing, were shipped to New York and the decay determined on arrival and at different periods thereafter. A circular entitled "Factors Affecting the Keeping Quality of Table Grapes While in Transit and in Storage," in which the results of the grape transportation work are summarized, has been issued and distributed.	(6) Improvement of methods of packing and shipping grapes in California..... 2,840.00	(6) Improvement of methods of packing and shipping grapes in California..... 2,840.00
(7) Fruit precooling investigations..... 11,500.00 This project consists of technical precooling studies, for which a specially built car, in which a refrigerating plant designed by an expert of this bureau has been secured. These facilities are seldom available where the investigations need to be conducted, but the car can be moved to any part of the country and carloads of fruit can be refrigerated in a building alongside the car, or a loaded car can be quickly refrigerated by blowing cold air from the coil room of the car either to the room or through the car loaded with produce. The car is now located at Riverside, Cal., where an investigation of the effect of cooling oranges under different temperatures and at different stages of rapidity is under way. <i>Results.</i> —The precooling investigations of the bureau are revolutionizing the methods of shipping fruits in some parts of the country. The transcontinental railroads running out of southern California are constructing precooling plants where trainloads of fruit can be quickly cooled after loading. The work has shown that the area of distribution can be widened by cooling fruits quickly after picking; that the ripening processes and decays can be checked; that the freight-carrying capacity of a car can be increased by loading the packages more closely together; and that there may be a saving of ice in the pre-cooled cars. These investigations have the hearty cooperation of the fruit-shipping interests and of the transportation companies.	(7) Fruit precooling investigations.. 10,900.00	(7) Fruit precooling investigations.. 10,900.00
(8) Fruit-storage investigations..... 4,800.00 This work is concerned chiefly with the storage of citrus fruits and apples, and is conducted both on the Pacific coast and in the East. The object is the determination of the principles which govern the successful cold storage of perishable fruits. Some attention is also being given to the farm storage house problem, with a view to the development of practical methods of storing fruit in the farm. The work is conducted in cooperation with several of the state experiment stations. <i>Results.</i> —The fruit storage work has brought about a more careful handling of fruits, in the quicker storage after harvesting, in the lowering of storage temperatures, and also in a knowledge of the principles involved in the handling of fruits for storage. Several publications have been issued outlining improved methods of storing various fruits. All of this work is closely related to the work on fruit transportation, and its results are therefore closely interwoven with the results of that work, previously described.	(8) Fruit-storage investigations..... 4,980.88	(8) Fruit-storage investigations..... 4,980.88

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Miscellaneous fruit studies.	Miscellaneous fruit studies.	Miscellaneous fruit studies.
(9) Improvement of citrus fruits in California. No expenditure in 1909.	(9) Improvement of citrus fruits in California..... \$5,080.00 This project consists of a survey of the citrus-fruit districts of California for the purpose of locating exceptionally desirable trees for propagation with a view to developing improved strains and types of greater productiveness, better quality, and greater resistance to various adverse environmental conditions, such as low temperatures, diseases, and insects. The growers of citrus fruits are being interested in the work, and an effort is being made to increase the yield and improve the quality of the product through systematic bud selection and top working from the most desirable trees. This work has been only recently begun, but promises valuable results.	(9) Improvement of citrus fruits in California..... \$5,080.00
(10) Pecan investigations..... \$1,750.00 This project consists of a study of the relative merit and adaptability of pecan varieties, to ascertain the conditions under which pecan culture can be successfully carried on, especially in the South Atlantic and Gulf States, and to determine the varietal adaptability of pecans to the soils and climatic conditions of those regions. A study of the effect of cross-pollination on quantity and quality of the crop is also being made. Results.—The more important seedling and grafted pecan orchards throughout the country have been located. Information on varietal adaptability is probably the greatest need of the pecan industry, and these orchards have been visited with a view to securing data on this point. Descriptions and colored plate illustrations of the most promising varieties of pecans have been made in the Yearbooks of the department, a total of 30 varieties of this nut having been thus described and illustrated since 1904. Experimental studies of the self-sterility of varieties are being made, as well as tests of the cracking quality of varieties, including determinations of proportional weights of kernel and shell of the leading varieties.	(10) Pecan investigations..... 1,750.00	(10) Pecan investigations..... 1,750.00
(11) Cooperative breeding of hardy fruits for the Mississippi Valley..... 500.00 Under this project a cooperative arrangement has been made with Mr. C. G. Patten, of Charles City, Iowa, and with the Iowa State Experiment Station and the Iowa State Horticultural Society, through which work along the line of the development of hardier orchard fruits of better quality than those now available will be carried on, with special reference to the needs of the upper Mississippi and Missouri valley regions. Results.—This work has long been conducted individually by Mr. Patten, and by the cooperative arrangement is now made a public matter in the interest of the Northwestern fruit industry. The work is located at Charles City, Iowa, under the joint supervision of this bureau and the Iowa authorities, and all varieties produced which promise to be of value are to remain public property, and to be available for dissemination in due time. This work gives indication of most valuable results.	(11) Cooperative breeding of hardy fruits for the Mississippi Valley..... 600.00	(11) Cooperative breeding of hardy fruits for the Mississippi Valley..... 600.00
(12) Fruit district investigations..... 2,750.00 This project consists of a study of the adaptability of apples and other orchard fruits to the various fruit districts of the United States; of the conditions of soil, climate, and other factors of influence which exist in those districts; and of the behavior of different varieties of fruits under such conditions and their adaptability thereto. The introduction of new or untried varieties into sections in which they seem promising is also a part of the work. The object is to collect information which will make it possible to recommend with reasonable certainty of success the culture of given varieties for particular regions. Results.—The field work of several years in the eastern mountain and Piedmont regions has been summarized and published. The results of a study of the adaptability of early apples to southern New Jersey and the Middle Atlantic States are nearly ready for publication. This work has a bearing on the future development of the fruit industry, as it aims to supply the grower with information which will enable him to select those varieties which will best serve his purpose.	(12) Fruit district investigations... 3,253.33	(12) Fruit district investigations... 3,253.33

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Miscellaneous fruit studies—Continued.	Miscellaneous fruit studies—Continued.	Miscellaneous fruit studies—Continued.
(13) Phenological and other studies of fruits. \$2,250.00 This work includes the taking of observations by more than 1,100 cooperators throughout the country on the dates of blooming, leafing, ripening, etc., of different fruits, to secure data on the relation of varieties to seasonal conditions, frosts, etc., in different sections; also the study of various fruit problems in the West, such as varieties for growth in the semiarid regions, on the national forests, and in other sections; and a study of farm canning and cider making. <i>Results.</i> —Valuable scientific data are being accumulated as a result of the cooperative phenological observations over a wide area. Much progress has been made in the establishment of a dry-land fruit garden at Akron, Colo., in cooperation with the Office of Dry Land Agriculture of this bureau. Cooperation has also been entered into with the Forest Service with a view to determining the best varieties of fruit and ornamental trees for planting near the rangers' cabins on the national forests, for the double purpose of improving their surroundings and providing a supply of fruit for home use.	(13) Phenological and other studies of fruits. \$2,595.67	(13) Phenological and other studies of fruits. \$2,595.67
Viticultural investigations.	Viticultural investigations.	Viticultural investigations.
(14) California grape investigations. 4,100.00 This project includes the maintenance and operation of ten experimental vineyards in California, where a study is being made of the congeniality of Vinifera varieties to various phylloxera-resistant stocks, and also of the adaptability of resistant stocks to soil types and conditions. Experiments in the grafting of Vinifera varieties on resistant stocks are being made, with a view to adapting them to regions infested with phylloxera. Trials of newly introduced varieties of grapes are also being made at the California vineyards. <i>Results.</i> —The results obtained in the Pacific coast grape work are nearly ready for submittal for publication. The cooperative vineyards in California now contain a large number of varieties of Vinifera grapes as well as resistant stocks upon which these varieties have been grafted. Cooperators in various parts of the country have been supplied with cuttings and rooted vines of these varieties for trial. Striking results as to the adaptability of varieties to soil types are being secured.	(14) California grape investigations. 6,497.50	(14) California grape investigations. 6,497.50
(15) New Jersey grape investigations. 950.00 This work has for its objects the reestablishment of the grape industry in the Middle Atlantic States and the development and improvement of the unfermented grape juice industry of the country. An experimental vineyard is maintained at Vineland, N. J., in cooperation with the New Jersey Experiment Station, where a collection of promising grape varieties is being assembled for experiments in cultural methods as well as in the control of diseases and insect pests. The latter phase of the work is conducted in cooperation with other offices of this bureau and of the department. <i>Results.</i> —The Vineland experimental vineyard now consists of 9½ acres, planted to 59 American grape varieties, 17 of which were added during the past year. The vineyard is in an exceptionally flourishing condition. Experiments in fertilizing, pruning, training, and spraying have shown that some remarkable results are possible in the renovation of old run-down Concord vines through proper methods and care, the yield being increased and the quality of the fruit improved. As a result of these experiments a considerable acreage of new vineyards has been planted in the vicinity of Vineland.	(15) New Jersey grape investigations. 1,200.00	(15) New Jersey grape investigations. 1,200.00
(16) Rotundifolia grape investigations. 575.00 This work has for its object the development of Rotundifolia grape culture in the South Atlantic and Gulf States. A study of the soils on which the different varieties thrive best and observations of the Rotundifolia in its native haunts are being made. Some attention is also being given to improvements in methods of culture and of training the vine, as well as in methods of marketing and handling the product. The chief experiments are located in North Carolina, in cooperation with the state department of agriculture. <i>Results.</i> —Pruning experiments have shown that the Rotundifolia varieties endure pruning well and are benefited thereby, both in size and quality of the fruit. The prospects for the development of the Rotundifolia grape industry in the South are very encouraging. The origin of the better and more promising varieties is being studied, and field observations on a large number of species are being made.	(16) Rotundifolia grape investigations. 775.00	(16) Rotundifolia grape investigations. 775.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FIELD INVESTIGATIONS IN POMOLOGY—Continued.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.	FIELD INVESTIGATIONS IN POMOLOGY—Cont'd.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Viticultural investigations—Continued.	Viticultural investigations—Continued.	Viticultural investigations—Continued.
(17) Miscellaneous grape investigations..... \$3,100.00	(17) Miscellaneous grape investigations..... \$4,252.50	(17) Miscellaneous grape investigations..... \$4,252.50
Under this project are grouped studies of the methods of pruning, trellising, training, and cultivating the grapevine and the uses of the fruit for different purposes; the giving of information as to the preparation of grape products; and a study of the adaptability of grape varieties to culture in different vineyard sections. <i>Results.</i> —A great deal of information has been collected and disseminated regarding the culture of the grape and the preparation of various products therefrom. Cuttings of promising varieties have been distributed for trial, and the grape industry has been aided wherever possible.		
GREENHOUSES, GARDENS, AND GROUNDS.	GREENHOUSES, GARDENS, AND GROUNDS	GREENHOUSES, GARDENS, AND GROUNDS.
(E. M. Byrnes, superintendent.)	(E. M. Byrnes, superintendent.)	(E. M. Byrnes, superintendent.)
Salaries, statutory..... \$21,920.00	Salaries, statutory..... \$22,160.00	Salaries, statutory..... \$25,360.00
Salaries, lump fund..... 12,073.12	Salaries, lump fund..... 12,959.75	Salaries, lump fund..... 5,619.75
Miscellaneous expenses and supplies..... 7,433.57	Miscellaneous expenses and supplies..... 8,070.25	Miscellaneous expenses and supplies..... 7,920.25
Total..... 41,426.69	Total..... 43,190.00	Total..... 38,900.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work..... 2,825.00	(1) General supervisory and office work..... 3,134.60	(1) General supervisory and office work..... 3,134.60
This project includes the necessary office and supervisory work connected with the maintenance of the department greenhouses, the care and ornamentation of the grounds, the experimental work with greenhouse crops, and the other projects outlined in the following paragraphs.		
(2) General care of department grounds..... 12,076.69	(2) General care of department grounds..... 12,331.50	(2) General care of department grounds..... 12,331.50
This project includes the necessary details connected with the ornamentation, keeping in repair, and proper appearance of the grounds surrounding the department buildings.		
(3) Repair and construction of greenhouses..... 6,750.00	(3) Repair and construction of greenhouses..... 6,900.00	(3) Repair and construction of greenhouses..... 2,610.00
This project includes the making of necessary repairs to the greenhouses and other structures of the department, and the construction of additional houses needed in connection with the normal growth of the work and with the removal of the old range of greenhouses.		
(4) Care of greenhouses and plants therein..... 8,825.00	(4) Care of greenhouses and plants therein..... 9,143.90	(4) Care of greenhouses and plants therein..... 9,143.90
This project includes the maintenance of the department greenhouses and the proper care of the collection of tropical and miscellaneous plants contained therein.		
(5) Experimental work with greenhouse crops..... 3,900.00	(5) Experimental work with greenhouse crops..... 4,280.00	(5) Experimental work with greenhouse crops..... 4,280.00
This project includes experiments in the growing of various florists' crops under glass, such as carnations, chrysanthemums, dahlias, and roses, and also in the forcing of vegetable crops, such as lettuce, celery, etc. This work has a great economic value and is yielding excellent results.		
(6) Greenhouse work in plant pathology and physiology..... 3,750.00	(6) Greenhouse work in plant pathology and physiology..... 3,920.00	(6) Greenhouse work in plant pathology and physiology..... 3,920.00
This project includes the work of various offices of the bureau in the greenhouses, in the study of plant diseases; drug plant and tea culture experiments; seed testing; the study of tropical plants, etc. Greenhouse facilities are provided for this work, together with the necessary labor, etc.		
(7) Propagation and distribution of plants..... 3,300.00	(7) Propagation and distribution of plants..... 3,480.00	(7) Propagation and distribution of plants..... 3,480.00
This project includes the propagation of various flowering plants for ornamenting the department grounds, for exhibition purposes, and for special distribution.		
FOREIGN SEED AND PLANT INTRODUCTION.	FOREIGN SEED AND PLANT INTRODUCTION.	FOREIGN SEED AND PLANT INTRODUCTION.
(David Fairchild, agricultural explorer, in charge.)	(David Fairchild, agricultural explorer, in charge.)	(David Fairchild, agricultural explorer, in charge.)
Salaries, statutory..... \$6,907.56	Salaries, statutory..... \$4,800.00	Salaries, statutory..... \$6,540.00
Salaries, lump fund..... 29,604.00	Salaries, lump fund..... 31,242.00	Salaries, lump fund..... 30,427.00
Miscellaneous expenses and supplies..... 7,435.43	Miscellaneous expenses and supplies..... 10,435.00	Miscellaneous expenses and supplies..... 9,468.00
Traveling and field expenses..... 33,096.73	Traveling and field expenses..... 16,453.00	Traveling and field expenses..... 16,475.00
Total..... 77,043.72	Total..... 62,930.00	Total..... 62,910.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS.	PROJECTS.	PROJECTS.
(1) General direction of plant introductions and projects connected therewith..... \$11,352.72	(1) General direction of plant introductions and projects connected therewith..... \$14,530.00	(1) General direction of plant introductions and projects connected therewith..... \$13,620.00
<p>Under this project is carried on the work of securing through correspondence in all parts of the world, new and valuable seeds and plants for the experimenters of this country. Through years of search the office has placed itself in touch with botanists, agriculturists, scientific institutions, commercial firms, travelers, and explorers all over the world, and is now in position to secure quickly from any part of the globe any plant which may be desired by a plant experimenter at one of the state agricultural experiment stations or by an individual plant breeder. To this project is also charged the expert scientific assistance required in the careful placing through correspondence in this country of the thousands of new seeds and plants that are imported, not only through foreign correspondence but by the agricultural explorers sent out by the bureau, and also the general supervision of the entire Office of Foreign Seed and Plant Introduction.</p> <p><i>Results.</i>—Thousands of new things are secured through this means at a minimum of expense, often being obtained by the exchange of American plants. Last year the number so imported was 2,029. Many promising things found by explorers, which later are lost or die, have to be secured again by correspondence. Out of the multitudes of possibly valuable new plants which could have been imported about 18,000 have been selected by correspondence during the past ten years and brought in and placed on trial in some part of the country. It was to be expected that most of these would not be successful, but enough of them have succeeded to make the work very profitable to the country.</p> <p>The best soy bean in Wisconsin, the best horse-radish in New Jersey, a new and productive velvet bean for Florida, the best turnip grown in Alaska, new rices for the Carolinas, new types of kafir corn and sorghums for Kansas, and fenugreek, one of the best orchard cover crops in sections of southern California, are a few of the examples of successful introductions made under this project.</p> <p>Of the 2,029 kinds of seeds and plants imported during the past year, some of the things included were different strains of alfalfa from Peru, Australia, Spain, and Chile; a collection of 72 varieties of wild and cultivated potatoes from southern Chile for the breeders of this crop; a reputed drought-resistant bamboo from India and others from Chile; a collection of forage seeds from the uplands of Abyssinia; varieties of new grapes from Bagdad; new barleys from high altitudes in central China; the Chinese leitchie, a new fruit for the Panama Canal Zone; the Indian bael fruit, a possible dry-land stock for the orange; and a shipment of cork-oak acorns from Spain.</p>		
(2) Agricultural explorations in foreign countries..... 9,100.19	(2) Agricultural explorations in foreign countries..... 7,500.00	(2) Agricultural explorations in foreign countries..... 8,000.00
<p>Under this project trained agricultural explorers are sent out in search of new seeds and plants, with instructions to purchase and import such as are believed capable of assisting in the solution of some one of the problems of crop diversification in which the official and private experimenters of the country are interested, or to make suggestions regarding the introduction of entirely new plant industries. Out of this project is paid the cost of travel and subsistence; salary of explorers, interpreters, and guides; purchase of seeds and plants; photographic materials; and the transportation of the collections from the interior of foreign countries and their shipment to America. The project covers explorations in Central Asia for hardy fruits for the Northwest; in South America for dry-land and wild potatoes; in Palestine for the original dry-land wheats and alkali-resistant fruit stocks; and in south China and India for new citrus fruits and new stocks for breeding.</p> <p><i>Results.</i>—Although not more than three explorers have ever been sent out in one year, they have in the past discovered a large number of plant possibilities. They have investigated the agricultural resources of many of the most important cultivated regions of the world, and have furnished descriptions of the value to American cultivators of the practices of foreign farmers. They have explored many wild regions for the relatives of our cultivated plants whose possibilities have not even been described in our literature.</p> <p>More than 7,000 different and carefully selected things have been sent in by these explorers, including dry-land wheats, which have proved extremely profitable; two of the most profitable oats now grown in the Northwest; dry-land sorghums, which are especially drought resistant; strains of alfalfa from Turkestan, which are hardier than the ordinary sorts, and others from Arabia and Ecuador, which produce 25 per cent more forage under irrigation in the Southwest than ordinary varieties; the new seedless grape, <i>Sultanina rosea</i>, which has been pro-</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>nounced by expert grape growers in California to be superior in color and size to the Thompson seedless, which is one of the great grapes of California; and many other things of great promise for the development of profitable new industries.</p> <p>A three years' expedition in north and central China and Manchuria was completed during the past year, and brought in a wealth of new plants, which are being propagated and sent out and which will place within reach of the farmers and fruit growers new upland rice; new seedless and puckerless persimmons of probable unusual hardness; a new winter legume for the Texas rice planter; two possible new dry-land orchard crops, the Chinese date, and the dry-land haw, for Arizona and New Mexico; a new and most attractive winter radish; a new dry-land stock on which the Chinese draft all their stoué fruits; a new hemp for Kentucky growers, which has already been pronounced promising by an important grower; a new dry-land elm; hardy willows and poplars; two new yellow roses; and a host of wild apples, pears, plums, cherries, apricots, etc., for the breeders of these plants. In all, more than 2,000 different things were secured as a result of this expedition.</p>		
(2a) Agricultural explorations in Siberia and Asia..... \$15,365.16		
<p>These explorations were conducted in 1908 and 1909 by Prof. N. E. Hansen, their object being to secure hardy forage plants and fruits which will thrive in the severe climate of the northwestern United States. This was the third expedition to this region, where valuable new alfalfas which will live through extreme cold had already been found. This expedition was conducted primarily for the purpose of securing seeds of two remarkable wild alfalfas, which grow on the Russian steppes under conditions as trying as those of the Dakotas, and which it is believed will aid in the creation of a perfectly hardy alfalfa for the Northwest and at the same time become wild and provide the ranges with a valuable new leguminous forage element which is much needed.</p> <p><i>Results.</i>—Seeds of the two wild species of alfalfa have been secured and are now being grown in South Dakota. The testing and breeding of these new varieties is already well under way. An alfalfa thought to be suited to the moist regions of Minnesota and Wisconsin was another of the discoveries resulting from this expedition. In addition to these new dry-land alfalfas for the Northwest, five species of clover, which are little known to American experimenters, and each having its own promise for a different region from the Dakotas to Arizona, were secured, as well as new and promising varieties of other forage crops, grains, and fruits. All of these new things are being given a thorough trial.</p>		
(3) Inventory and record of new plant introductions and distributions..... 5,751.67	(3) Inventory and record of new plant introductions and distributions..... \$6,220.00	(3) Inventory and record of new plant introductions and distributions..... \$5,640.00
<p>Under this project are grouped the expenses necessary for the identification and the publication of the descriptions of all new plant introductions, and also the records of the placing of every new seed or plant in the hands of experimenters. Every plant or seed that is received (they arrive at the rate of 8 to 10 shipments a day) has to run the course of an assistant who numbers it, an entomologist and pathologist who inspect it, a botanist who makes sure that it is properly named, and an expert who cleans or disinfects it. When it is sent out to the experimenter, a permanent record is kept of the distribution.</p> <p><i>Results.</i>—Sixteen inventories have been published during the past few years, containing the printed descriptions of more than 23,000 different introductions. These form a volume of over 1,600 pages, in which is brought together an immense amount of valuable information regarding the whereabouts of new and valuable plants, as well as of their uses and the methods of their cultivation in foreign countries. A historical record of the distribution of hundreds of thousands of plants all over the United States has been made, and this is proving of great value in tracing introductions which later have turned out to be of value to the farmers and fruit growers.</p>		
(4) Propagation of foreign plant introductions..... 4,200.00	(4) Propagation of foreign plant introductions..... 10,440.00	(4) Propagation of foreign plant introductions..... 10,500.00
<p>This project includes the propagation in the greenhouses of newly introduced plants (which it is desirable to secure in small quantities in order to avoid the danger of introducing dangerous diseases), so that they can be supplied to the experimenters of the country in quantities sufficient for their thorough trial. Under this heading are also being propagated tropical fruits for the Panama Canal Zone and new Chinese plants for importation.</p> <p><i>Results.</i>—Several most valuable new methods for the rapid propagation of material which has been sent in from foreign countries have been devised under this project. These methods have so reduced the time required for the production of a plant for field culture from</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>a single imported bud stick that in two years from the arrival of a single new plant hundreds of young plants can be distributed.</p> <p>Valuable collections of the new East Indian fruits, such as the mango, avocado, persimmon, loquat, anona, leitchie, mangosteen, and doekoe have been made available to the plant breeders of the country through the distribution of plants propagated by the new methods worked out under this project. Thousands of new forage plants, grains, leguminous cover crops, shade trees, ornamentals, root crops, bamboos, fiber plants, etc., have been grown and distributed in like manner.</p> <p>(5) Plant introduction garden, Chico, Cal. \$10,054.22</p> <p>This garden consists of 89 acres, 59 of which are actually planted with newly introduced fruit, forage, grain, or root crops. The facilities of the garden include a nursery, seed beds, greenhouses, lath houses, and economic collections of the newly imported plants. A special object of the garden is the immediate handling of plant shipments from the Orient. Here these plants are propagated and prepared for distribution to various parts of the country, particularly to the milder portions.</p> <p><i>Results.</i>—Through the agency of this garden the department has been able to distribute to experimenters scattered widely over the country the Japanese paper plant, the Chinese wood-oil plant, a new Chinese plum stock for stone fruits, the various sorts of figs and capri-figs, the Mediterranean pistache and carob, Chinese walnuts and chestnuts, Japanese matting plants, new loquats, new olives, etc. This garden is the principal nursery at which the thousands of new introductions have been grown and where a stock of certain of them is maintained.</p> <p>The garden now contains the largest collection of fig varieties in the country; a special collection of grape varieties; the stock plants of a remarkable collection of fodder cacti; collections of pistaches, almonds, walnuts, timber bamboos, Chinese dates, Chinese persimmons, Chinese apricots, wood-oil plants, new vegetables, and a large number of other introductions which are held here and propagated as rapidly as the demand for them makes necessary.</p> <p>(6) Mississippi Valley plant introduction garden, Ames, Iowa. 822.00</p> <p>This garden has been established more than a year and now contains a considerable number of hardy fruits and other plants collected by exploration and correspondence. The object of the garden is to propagate and distribute young plants of these new introductions to experimenters in the great Mississippi region, where there is a great demand for hardier plants of all kinds and where there are a large number of plant breeders who at the present time are endeavoring to develop hardier varieties of fruits which will stand the severe climate of the region.</p> <p><i>Results.</i>—Through our explorer in northern China, Manchuria, and Siberia some especially hardy types of pears, apples, plums, cherries, and other fruits and ornamental plants were secured and placed for propagation at this garden. These will be ready for distribution to fruit breeders this autumn. A search has been made through the literature for knowledge of any wild apples, pears, or other fruits which are likely to be of assistance to these breeders in the solution of their problems. As a result of this search, the presence of orchards of wild apples and pears in central Asia has been discovered and plans are in progress to secure these wild forms for breeding and propagation purposes.</p> <p>(7) Cooperative work on subtropical fruits in southern Florida. 6,465.25</p> <p>This work, formerly confined to the subtropical garden at Miami, Fla., has undergone some necessary modifications during the past year. Efforts will hereafter be concentrated on a few products that experience has shown to be of special value, such as the mango, avocado, anona, and guava. Arrangements have been made with fruit growers in Miami and in southern Florida generally for cooperative work with these subtropical plants, so that the government supply for distribution will be adequate.</p> <p><i>Results.</i>—One of the imported East Indian mangos, the Sandersha, fruited heavily for the first time in this country, and the fancy-fruit dealers in New York are confident that it will bring fancy prices and meet with a large sale. An apparently new and successful method of budding the mango has been devised and is being tested. Various species of the anona have been crossed with success, and it is believed that some desirable new fruits will be produced in this way. A method of budding the sapodillo has also been worked out.</p>	<p>(5) Plant-introduction garden, Chico, Cal. \$10,530.00</p> <p>(6) Mississippi Valley plant-introduction garden, Ames, Iowa. 900.00</p> <p>(7) Cooperative work on subtropical fruits in southern Florida. 5,100.00</p>	<p>(5) Plant-introduction garden, Chico, Cal. \$10,950.00</p> <p>(6) Mississippi Valley plant-introduction garden, Ames, Iowa. 1,000.00</p> <p>(7) Cooperative work on subtropical fruits in southern Florida. 5,100.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
8) Bamboo investigations..... \$2,791.01 There is no more universally useful plant in the world than the bamboo, and in the Orient the number of its uses are counted by the hundred. It is the object of this project to establish in this country groves of this remarkable plant, so that its unique timber, which is not like that of any of our forest trees, can be studied by the manufacturers of a great variety of different things in connection with which it is believed this peculiar material will find a use. The value of the bamboo as a new vegetable is also being given attention, since the young shoots of the plant form not only one of the dearest vegetables in the Orient, but one of those most appreciated by Occidentals. <i>Results.</i> —During the past year a shipment of selected bamboo plants, representing the three most profitable varieties for timber purposes, was brought in by an agent of the department from Japan. Over two carloads (3,000 plants) were imported; and although the bamboo is one of the most difficult plants to ship the importation has been a success, and the plants will be ready in the autumn to plant out in a special propagating and testing station in northern Florida, for which arrangements are being made. From this station the plants will be distributed to points along the Gulf and farther north for the purpose of starting commercial groves of this important plant, from which such a variety of valuable articles are manufactured in the Orient. As a crop for the unoccupied cane-brake lands and the washed hillsides the bamboo has considerable promise, and may also be valuable enough to grow even under irrigation. As an ornamental alone, its introduction into the parks and gardens of the South will be of great value.	(8) Bamboo investigations..... \$1,850.00	(8) Bamboo investigations..... \$800.00
(9) Miscellaneous plant-introduction problems..... 1,035.30 Under this project are grouped a number of problems which are being carried forward to the stage where they will be worthy of special and more extensive investigation. These include the study of the mango varieties and their suitability to Florida conditions; an investigation of the cork oak; the testing of the yautias, taros, and dasheens, whose possibilities as root crops in the South are yet in doubt; investigations of the East Indian tropical fruits, such as the mangosteen, leitchiee, and ramboutan; and various other related problems. <i>Results.</i> —Cork oaks of considerable size are growing in the Gulf States, and there is no doubt that the trees will succeed in this country. The Florida planters have been supplied with the best mango varieties in the world, and many of these have fruited there, and the department has been of great assistance in the progress already made in this new industry. Collections of yautias and other irrigated root crops which form one of the great foods of the Orient and Pacific islands are being increased as rapidly as possible in Florida and South Carolina. Mangosteen plants three years old are now established on the Panama Canal Zone and are growing well. The best Portuguese and Spanish carobs have been secured and are now being propagated for distribution in those regions where the seedlings have shown themselves able to grow.	(9) Miscellaneous plant-introduction problems..... 610.00	(9) Miscellaneous plant-introduction problems..... 1,900.00
(10) Special barley investigations..... 3,036.55 The objects of this work are to ascertain the best types of malting barleys and to what classes of soil they are specifically adapted; to determine what kernel and other characters compose an ideal malting barley; and to test the already known pedigreed types of this grain and to produce by breeding and selection other pure races which will be adapted to the peculiar needs of this special industry and to the peculiar requirements of different soils. The relatively inferior quality of American barleys, compared with those of Europe, is generally recognized. These investigations are therefore of special importance, since we can never successfully compete with other countries, either in the raw grain or in its products, until the quality and uniformity of our barleys are greatly improved. <i>Results.</i> —From laboratory studies an entirely new point of view from which to consider all malting barleys has been obtained, and the presence of what should be termed the malting organ of the barley kernel has been emphasized and the biological analysis of the grain as distinct from the old chemical analysis has been established. The acclimatization of the pedigreed Swedish and English barleys in the Northwest has been carried so far as to show the great superiority of certain types for certain classes of soils, and the necessity of finding for each region the variety which is particularly suited to it instead of endeavoring to make the farmers grow on all classes of soil a single variety, because it is a well-known one.	(10) Special barley investigations... 3,900.00	(10) Special barley investigations... 3,900.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(11) Matting-plant investigations..... \$3,430.77 This project included experiments and investigations in the cultivation of both native and introduced matting plants in the Southern States with a view to ascertaining the possibilities of the domestic production of the raw materials used in the matting industry, which are now imported to the value of \$4,000,000 annually. There are perfected looms in America which are fed by imported raw material, rush and sedge straw. The Americans are being shut out of the Japanese straw market by Japanese manufacturers, and must get their raw material in this country or take their machines to Japan or China and operate them there. <i>Results.</i> —As a result of the work done under this project, an explorer was sent to Japan and secured, notwithstanding the opposition of the Japanese matting guilds, 75,000 plants of the Japanese rush and 380,000 plants of the Japanese sedge. It was found necessary to increase these by propagation at the Plant Introduction Garden, at Chico, Cal., but carload lots were sent to points in Texas, Louisiana, and South Carolina, where the sedge plants produced a quality of straw pronounced by manufacturers as equal to the imported material. From these first harvestings the first all-American matting has been made. The fact has been established that these plants can be grown in this country and that they have certain specially attractive qualities which fit them for use as a reclamation crop for rice lands in the Carolinas.	(11) Matting-plant investigations... \$1,100.00 NOTE.—The project has been necessarily suspended, owing to the fact that under the existing tariff regulations the American manufacturers have found it impossible to compete with the cheap labor of the Orient.	(11) Inspection and quarantine facilities for plant-introduction work..... \$1,000.00 The bringing in of new plants from abroad is always fraught with danger—the danger of introducing some new insect, bacterial, or fungus pest which will do serious damage to the crops of the country. Although every plant and all the seeds which are imported by the Government are submitted for inspection on their arrival, there are cases of an obscure nature in which no pathologist can determine, until the plants or seeds have been grown, whether the suspicious appearances which are discovered are those of a dangerous disease or not. For the maintenance and observation of such plants increased quarantine facilities are required, and it is planned that these shall be paid for out of this proposed project. In many foreign countries there are known to be dangerous pests, and at any time these may find their way to America. It is desirable that this problem be given special study by American experts and steps be taken to warn the public against the importation of material from infected regions. There are a host of complicated questions involved in the proper administration of a plant quarantine, and at the present time the experimental data on the subject are totally inadequate. Direct and careful experiments to determine the best way to inspect seeds and scions, to disinfect, clean, and fumigate them, and to keep them under the necessary surveillance will be carried out under this project in cooperation with the plant pathologists and entomologists of the department.
(12) Grain introductions..... 1,063.88 This work was carried on in cooperation with the Office of Grain Investigations, and consisted in the testing of a large number of new grains imported from foreign countries. Wheats, barleys, rices, and other crops were included in the work, having been sent out for preliminary testing to selected stations throughout the country with a view to their later distribution to farmers for trial. This work has now been assumed entirely by the Office of Grain Investigations, and is described more in detail under that office elsewhere in this report.	(12) Chinese wood-oil investigations..... 250.00 Wood oil is considered by the varnish manufacturers of the country to be the best of all the drying oils, and it is imported into this country from central China to the amount of 2,000,000 gallons a year, which represents a money value of \$500,000. The oil is expressed	(12) Chinese wood-oil investigations..... 500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.	FOREIGN SEED AND PLANT INTRODUCTION—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p><i>Results.</i>—Many new grain crops have been introduced under this project during the past ten years. The durum-wheat introduction, which was accomplished under this cooperative arrangement, is a notable example, and the wheat growers of the Northwest are to-day getting out of its culture more than a million dollars annually. Other crops, such as proso, emmer, new rices, barleys, etc., have been successfully introduced. The results with these crops are more fully outlined under the Office of Grain Investigations.</p>	<p>from the seeds of a deciduous tree called the "Tung she," which is grown in groves upon the poor lands along the Yangtse Valley and requires little hand labor.</p> <p><i>Results.</i>—It has been shown by preliminary tests that the wood-oil tree will grow in the Gulf region, and 3-year-old trees in Mississippi have borne a few fruits. Small trial plantings consisting of several hundred trees have been put out in Louisiana, California, Georgia, Alabama, and Texas, in order to test the cold resistance and bearing capacity of the plants. Already these have passed through two winters without being injured, and as the trees are deciduous and live on dry hillsides where there is good air drainage, it is hoped they will prove adapted to the region permanently. If they do, this will furnish to the South a new tree crop which promises to be a lucrative one, as it requires little attention.</p> <p>Thousands of seeds of the wood-oil tree have been imported and grown in the nursery and are now scattered over those regions where the trees are likely to succeed. A detailed investigation of the industry has been made and the importers and varnish makers have become interested in the experiments. A publication setting forth the advantages of the culture of this tree is in preparation.</p>	
(13) Grape Introductions..... \$2,575.00		
<p>This work was conducted in cooperation with the Office of Field Investigations in Pomology and is now being continued by that office. Ten experimental vineyards are maintained in California, in which are being tested a remarkable collection of grapes, especially varieties resistant to the phylloxera, which is doing such a large amount of damage in California. The object is to ascertain which is the best stock for grafting in the vineyards of that State. The work has now passed the preliminary or introduction stage, and for this reason the work has now been entirely transferred to the Office of Field Investigations in Pomology.</p> <p><i>Results.</i>—The results secured under this project have been very satisfactory, and are fully described in connection with the grape investigations carried on by the Office of Field Investigations in Pomology, elsewhere in this report.</p>		
FORAGE CROP INVESTIGATIONS.	FORAGE CROP INVESTIGATIONS.	FORAGE CROP INVESTIGATIONS.
(C. V. Piper, agrostologist in charge.)	(C. V. Piper, agrostologist in charge.)	(C. V. Piper, agrostologist in charge.)
Salaries, statutory..... 3,806.33	Salaries, statutory..... \$2,440.00	Salaries, statutory..... \$3,160.00
Salaries, lump fund..... 19,422.00	Salaries, lump fund..... 17,630.00	Salaries, lump fund..... 17,510.00
Miscellaneous expenses and supplies..... 5,630.75	Miscellaneous expenses and supplies..... 5,820.00	Miscellaneous expenses and supplies..... 5,220.00
Traveling and field expenses..... 5,915.92	Traveling and field expenses..... 4,370.00	Traveling and field expenses..... 4,370.00
Total..... 34,775.00	Total..... 30,260.00	Total..... 30,260.00
PROJECTS.	PROJECTS.	PROJECTS.
(1) General supervisory and office work..... 6,500.00	(1) General supervisory and office work..... 6,118.00	(1) General supervisory and office work..... 5,718.00
<p>This project includes the planning and general supervision of the field investigations, the carrying on of correspondence, and other necessary details connected with the work.</p> <p><i>Results.</i>—The results under this project are reflected in the progress noted under all of the other projects described in the following paragraphs:</p>		
(2) Alfalfa investigations..... 6,250.00	(2) Alfalfa investigations..... 4,812.00	(2) Alfalfa investigations..... 5,012.00
<p>This work has for its objects the extension of alfalfa culture in the East in favorable districts and the introduction of new varieties in the West. Special attention is being given to the development of varieties which will resist cold and drought, as well as varieties which will give greater yields than those ordinarily grown. Tests of new or imported varieties, such as the Arabian,</p>		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
FORAGE CROP INVESTIGATIONS—Continued.	FORAGE CROP INVESTIGATIONS—Continued.	FORAGE CROP INVESTIGATIONS—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<p>Turkestan, Siberian, and variegated alfalfas, are a part of the work.</p> <p><i>Results.</i>—The discovery of the group of strains of relatively hardy alfalfas, designated by the term "variegated alfalfa," is important in that these strains are relatively hardy and drought resistant. Of these the Grimm alfalfa has proved the hardiest, and the seed production of this strain is being encouraged, as is also that of the commercial sand lucern and the Canadian variegated alfalfa, both of which are proving much harder than the ordinary alfalfa.</p> <p>Arabian alfalfa, secured in 1905, has proved to be by far the heaviest yielder in the Southwest. Twelve cuttings were obtained at Mecca, Cal., during 1908, as against eight cuttings of ordinary alfalfa. The Arabian is the most remarkable alfalfa yet found for rapidity of growth. Its rapid growth, however, appears to shorten the life of the stands, as the older fields now show signs of deterioration.</p> <p>Alfalfa culture in the East promises to become important. As a result of our campaign it has been demonstrated that the principal difficulties in the way of success with alfalfa are inoculation, lack of drainage, lack of lime, and weeds. The latter can be largely controlled by proper cultural methods, especially by late summer planting of the crop. Where good inoculation has been secured and proper care taken in the selection and preparation of the soil, practically all of our experimenters have secured satisfactory stands. Much has been learned regarding the great care necessary to secure good inoculation.</p> <p>(3) Investigations of new and standard grasses and of dry-land forage crops..... \$5,500.00</p> <p>This work has for its objects the investigation of new and standard grasses and the introduction and extension of the culture of new and improved strains of timothy, orchard grass, meadow and pasture mixtures, and new species of grasses, such as Para grass, Rhodes grass, and Natal grass; also the establishment of the rainfall limitations of perennial grasses and legumes, and to secure for those sections where the rainfall is too light to support perennials new annual forage crops having a sufficient degree of drought resistance to succeed under arid and semiarid conditions. Attention is also being given to the development of methods of culture which will conserve sufficient moisture to produce larger and more constant yields of the forage crops already known. The increasing settlement of the arid sections has made the question of dry-land forage crops one of extreme importance.</p> <p><i>Results.</i>—Extensive tests of improved strains of timothy conducted in cooperation with farmers on a field scale have indicated definitely that the yield of hay of this crop can be materially increased. Numerous tests were conducted in Iowa, Wisconsin, Ohio, and New York, and in each State the results were very favorable. Results from preliminary tests of selected strains of orchard grass show clearly that both yield and quality of hay of this grass can be greatly improved.</p> <p>By the use of mixtures of certain standard grasses in many sections not well suited to the growing of timothy, profitable returns have been secured from meadows. The one mixture which has given best results is orchard grass, tall meadow oat grass, and alsike clover, with meadow fescue, the rye grasses, or redtop for bottom grasses. In many sections mixtures of grasses have proved superior to Kentucky blue grass for pastures. These mixtures not only have a greater carrying capacity than Kentucky blue grass, but also permit of earlier and later grazing. The best combinations of grasses for different conditions have been well worked out.</p> <p>In the work with dry-land forage crops, tests have shown that certain grasses and legumes may be profitably grown in cultivated rows, if seed production is combined with forage. The combination of legumes with the sorghums in the same row has been shown to be valuable in improving the quality of the forage. Among the new crops tested, the Dolichos bean, the moth bean, and Rhodes grass have proved especially drought resistant and of great promise for the South as well.</p> <p>(4) Cowpea and soy bean investigations..... 3,000.00</p> <p>The chief object of the work with cowpeas is to secure cheaper and better seed, so as to bring about a great increase in cowpea culture. The cowpea is to the South what clover is to the North, and the lessening of the cost of the seed and the improvement of varieties are important problems. Much attention is being given to the study and development of harvesting machinery. The work with soy beans has for its objects the determination of the best varieties both for hay and for grain, and the distribution of the most promising varieties for trial.</p>	<p>(3) Investigations of new and standard grasses and of dry-land forage crops..... \$5,750.00</p> <p>(4) Cowpea and soy bean investigations..... 1,300.00</p>	<p>(3) Investigations of new and standard grasses and of dry-land forage crops..... \$5,950.00</p> <p>(4) Cowpea and soy bean investigations..... 1,800.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p>FORAGE CROP INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>This crop is rapidly growing in importance, and much interest is being shown at present in its value for oil production, in view of the threatened reduction in the quantity of cotton seed.</p> <p><i>Results.</i>—During the past year more than 150 varieties and strains of cowpeas have been tested, many of them being new introductions, while others are hybrids of recent origin. Two of these new hybrids, the Groit and the Brabham, are especially valuable and seed of them has been distributed in quantity.</p> <p>A study of harvesting machinery has resulted in finding a new machine that will thrash cowpeas perfectly. Heretofore most of the seed has been picked by hand. We are encouraging in every way possible the greater production of cowpea seed by the use of this thrasher and other labor-saving appliances. A new bulletin on cowpeas, setting forth up-to-date methods of growing and harvesting, has recently been issued.</p> <p>More than 300 varieties of soy beans have been secured and these are being generally tested throughout the country to determine the best varieties both for hay and grain. Several of these have already demonstrated their superiority and are being grown in quantity for general distribution.</p> <p>(5) Sorghum investigations..... \$2,800.00</p> <p>This work has for its objects the extension of sorghum culture for forage and the utilization of this plant in the South, especially where the rainfall is more or less deficient. The introduction of new varieties and the testing of all kinds of sorghum are a part of the work. The wider utilization of this plant is of great importance, and seed of improved and pure-bred strains is being propagated for distribution.</p> <p><i>Results.</i>—Of the many new sorghums introduced, three are of especial promise. One from Natal, called Pink Kafir, is of such superior excellence that it will be generally distributed as soon as seed can be grown. Another is Feterita, from Sudan, which is very distinct from any other sorghum yet discovered.</p> <p>Large quantities of pure-bred seed from new and improved varieties were grown during the past season and will be distributed for trial. A bulletin, setting forth the results of the experiments has been published. This is of timely importance owing to the great influx of settlers into the dry regions, where the sorghum crop is the mainstay of the farmer.</p> <p>(6) Investigation of forage crops for Florida and the Gulf coast..... 2,500.00</p> <p>This work includes the testing of various grasses and other forage plants, especially legumes. The objects are to introduce and encourage the cultivation of those varieties which are found best suited to the region in question.</p> <p><i>Results.</i>—Among the new crops worthy of especial mention are several new velvet beans, one of which is early enough to mature as far north as North Carolina, and another which far outyields the Florida velvet bean in seed production.</p> <p>The high value of Para grass has also been demonstrated and its culture vigorously pushed. Rhodes grass is also exceedingly promising, and numerous co-operative tests with farmers are under way.</p> <p>(7) Tests of miscellaneous forage crops..... 8,225.00</p> <p>This work covers a wide range of forage crops, including berseem, bur clover, crimson clover, vetch, crops for green manuring, the mung bean, and several new forage plants, such as the Tangier pea and guar. Extensive tests of these plants are being made in various parts of the country, and their culture in promising localities is being encouraged.</p> <p><i>Results.</i>—Among the most valuable new forage plants tested are the Tangier pea, moth bean, and snail clover, all of which are sufficiently valuable to warrant distribution. Seed of the first two has been grown in quantity for distribution.</p> <p>About 60 varieties and species of vetches have been tested for two years. One of these, <i>Vicia dasycarpa</i>, is of especial promise, resembling hairy vetch, but being so early that it can be used as a winter crop in rotation with cotton. Seed is being grown in quantity. Extensive co-operative experiments with farmers, especially in the South, with common vetch and hairy vetch have been conducted during the past two years, resulting in great interest in this crop and a greatly increased culture. This work is being continued.</p>	<p>FORAGE CROP INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(5) Sorghum investigations..... \$2,500.00</p> <p>(6) Investigation of forage crops for Florida and the Gulf coast... 1,250.00</p> <p>(7) Tests of miscellaneous forage crops..... 8,530.00</p>	<p>FORAGE CROP INVESTIGATIONS—Continued.</p> <p>PROJECTS—continued.</p> <p>(5) Sorghum investigations..... \$2,500.00</p> <p>(6) Investigation of forage crops for Florida and the Gulf coast... 1,250.00</p> <p>(7) Tests of miscellaneous forage crops..... 8,030.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SEED DISTRIBUTION.		
(Directed by Chief of Bureau.)		
Salaries, statutory.....	Salaries, statutory.....	Salaries, statutory.....
Salaries, lump fund.....	Salaries, lump fund.....	Salaries, lump fund.....
Miscellaneous expenses and supplies.....	Miscellaneous expenses and supplies.....	Miscellaneous expenses and supplies.....
Traveling and field expenses.....	Traveling and field expenses.....	Traveling and field expenses.....
Total.....	Total.....	Total.....
PROJECTS.		
(1) Administrative and miscellaneous expenses.....	(1) Administrative and miscellaneous expenses.....	(1) Administrative and miscellaneous expenses.....
This project includes the necessary expenses in supervising the distribution, the office work and correspondence, and various other necessary details connected with the projects outlined in the following paragraphs:		
(2) Vegetable and flower seed distribution.....	(2) Vegetable and flower seed distribution.....	(2) Vegetable and flower seed distribution.....
This project includes the purchase and distribution of the vegetable and flower seeds required for the congressional seed distribution, as well as for distribution by the Secretary of Agriculture. During the fiscal year 1909, on account of the high price of seeds, the congressional quotas were limited to 10,000 packages of vegetable seed and 500 packages of flower seed.		
(3) Cotton seed distribution.....	(3) Cotton seed distribution.....	(3) Cotton seed distribution.....
This project includes the distribution of select varieties of cotton seed to those Congressmen representing cotton-growing districts. These varieties have been bred by the plant breeders of the Bureau of Plant Industry with special reference to resistance to disease, earliness of maturity, etc. During the fiscal year 1909 the quota assigned each Member from the cotton States was 80 packages of 1 peck each.		
(4) Tobacco seed distribution.....	(4) Tobacco seed distribution.....	(4) Tobacco seed distribution.....
This seed is distributed along the same general lines as the cotton seed, but is not assigned in regular quotas to each Congressman. The seed consists of the improved tobaccos developed by the bureau for the various tobacco-growing districts of the country.		
(5) Lawn-grass seed distribution.....	(5) Lawn-grass seed distribution.....	(5) Lawn-grass seed distribution.....
This project consists of the distribution of standard lawn mixtures as a regular part of the congressional seed distribution. Each Congressman is allotted a quota of 30 packages, each containing about one-half pound of seed, sufficient to sow 200 square feet.		
(6) Sugar-beet seed growing and distribution.....	(6) Sugar-beet seed growing and distribution.....	(6) Sugar-beet seed growing and distribution.....
This project consists both of the distribution of select varieties of sugar-beet seed on congressional and other request, and also of the experimental growing of sugar-beet seed in this country, with a view to the development of a domestic source of supply for high-grade sugar-beet seed. No regular quota of this seed is assigned, the object being to distribute it where it is most greatly needed and where it will be of the greatest value.		
(7) Grapevine and strawberry plant distribution.....	(7) Grapevine and strawberry plant distribution.....	(7) Grapevine and strawberry plant distribution.....
This is a regular part of the congressional seed distribution, each Congressman being assigned quotas of 8 packages of grapevines and 10 packages of strawberry plants, containing respectively, 5 vines and 15 plants each.		
(8) Bulb distribution.....	(8) Bulb distribution.....	(8) Bulb distribution.....
This is also a regular feature of the congressional distribution, each Congressman having a quota of 20 packages of bulbs, each package containing 20 bulbs in an assortment of tulips, narcissi, and hyacinths.		
(9) Miscellaneous seed and plant distribution.....	(9) Miscellaneous seed and plant distribution.....	(9) Miscellaneous seed and plant distribution.....
This project includes the securing and sending out of various kinds of seeds and plants other than those included in the regular distribution, such as improved varieties of seedling citrus trees, various ornamentals, shrubs, bulbous plants, etc.		
(10) Shipping and packing of seeds and plants.....	(10) Shipping and packing of seeds and plants.....	(10) Shipping and packing of seeds and plants.....
This project includes the necessary labor and expenses connected with the packing and shipment of the various classes of seeds and plants, other than vegetable and flower seed, included in the regular and special distribution.		
(11) Seed cleaning.....	(11) Seed cleaning.....	(11) Seed cleaning.....
This work has for its object the elimination of impurities in the various kinds of seed secured for distribution. Suitable machinery for the proper cleaning of the seed has been installed, and the quality of the seeds sent out is being greatly improved thereby.		
(12) Bulb propagating garden, Bellingham, Wash.....	(12) Bulb propagating garden, Bellingham, Wash.....	(12) Bulb propagating garden, Bellingham, Wash.....
The object of this garden is to ascertain the possibilities of the production of Dutch bulbs in the Puget Sound region, with a view to the development of an industry which will supply the needs of the seed distribution, as well as a part of the demand for bulbs in the seed trade. The region in question is believed to be well adapted to bulb culture, and methods of propagation are now being worked out.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Plant Industry—Continued.

OFFICES, LABORATORIES, AND PROJECTS—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
SOUTH TEXAS GARDEN, BROWNSVILLE, TEX. (E. C. Green, pomologist in charge.)	SOUTH TEXAS GARDEN, BROWNSVILLE, TEX. (E. C. Green, pomologist in charge.)	SOUTH TEXAS GARDEN, BROWNSVILLE, TEX. (E. C. Green, pomologist in charge.)
Salaries, lump fund..... \$3,880.00	Salaries, lump fund..... \$6,285.00	Salaries, lump fund..... \$6,285.00
Miscellaneous expenses and supplies..... 5,230.00	Miscellaneous expenses and supplies..... 2,815.00	Miscellaneous expenses and supplies..... 2,815.00
Total..... 9,110.00	Total..... 9,100.00	Total..... 9,100.00
PROJECT.	PROJECT.	PROJECT.
South Texas Garden..... 9,110.00	South Texas Garden..... 9,100.00	South Texas Garden..... 9,100.00
<p>This garden is located on a part of the Fort Brown Military Reservation. Cooperation with the Texas Agricultural Experiment Station is in effect. The work has for its objects the testing and propagation of various seeds and plants believed to be especially suited for culture in south Texas, and to determine the possibilities of the region in agriculture and horticulture.</p> <p><i>Results.</i>—Rapid progress has been made in the development of the work at this garden, which was inaugurated two years ago. Much information has been collected regarding the agricultural possibilities of the region, and advice has been given to settlers in south Texas. A wide variety of crop plants are being grown and tested at the garden, and seeds or plants of the most promising of these have been distributed to co-operators for trial. A circular has been issued during the past year on the agricultural possibilities of south Texas, with special reference to the status of citrus fruit growing in that region. Much land is being sold for citrus culture, and the department has placed the facts as to the adaptability of the region to this industry within the reach of prospective settlers.</p> <p>Total classified expenditures of the Bureau of Plant Industry to August 31, 1909..... 1,276,150.79</p> <p>Less repayments to credit of appropriations..... 117.66</p> <p>Net expenditures to August 31, 1909..... 1,276,033.13</p> <p>Advances to temporary special disbursing agents..... 40,764.45</p> <p>Outstanding liabilities on August 31, 1909..... 40,190.55</p> <p>Total expenditures and liabilities for the fiscal year 1909..... 1,356,988.13</p> <p>Balance to be turned back into Treasury..... 14,076.06</p> <p>Total of all appropriations for the Bureau of Plant Industry for the fiscal year 1909..... 1,371,064.19</p>		
<p>Total of all appropriations for the Bureau of Plant Industry for the fiscal year 1910 (an increase over 1909 of \$316,926.99)..... 1,687,991.18</p>		
<p>Total of all appropriations estimated for the Bureau of Plant Industry for the fiscal year 1911..... 1,698,206.00</p> <p>NOTE.—There is an actual decrease in the 1911 estimates of \$11,000. The figures, however, show an apparent increase over 1910 of \$10,304.82, but this is due to the fact that a part of the 1910 appropriation was made immediately available for use during the preceding fiscal year.</p>		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270).

FOREST SERVICE.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Forest Service, 1909, \$144,300.</i>	<i>Salaries, Forest Service, 1910, \$60,200.</i>	<i>Salaries, Forest Service, 1911, \$60,200.</i>
Pinchot, Gifford..... Forester, at \$5,000..... \$5,000.00	1 forester, Chief of Bureau..... \$5,000.00	1 forester, Chief of Bureau..... \$5,000.00
McVean, M. J..... Clerk, at \$2,100..... 2,100.00	NOTE.—The following places were dropped:	
Anderson, G. G..... Clerk, at \$2,000..... 2,000.00	1 clerk..... \$2,100	
Satterlee, J. B..... Clerk, class four..... 1,800.00	1 clerk..... 2,000	
Smith, Albert M..... Clerk, class four..... 1,800.00	6 clerks, class four (2 of whom are transferred to the Division of Accounts and Disbursements)..... 10,800	
Staley, William F..... Clerk, class four..... 1,800.00	3 clerks, at \$1,700 each..... 5,100	
Tibbott, O. H..... Clerk, class four..... 1,800.00	1 clerk, class three..... 1,600	
Lees, Fred..... Clerk, class four..... 1,725.00	1 clerk..... 1,500	
Craft, Q. R..... Clerk, class four..... 750.00	2 clerks, class two (1 of whom is transferred to the Division of Accounts and Disbursements)..... 2,800	
Ziegler, E. A..... Clerk, at \$1,700..... 1,050.00	1 clerk..... 1,300	
Shir-Cliff, W. H..... Clerk, at \$1,700..... 1,700.00	8 clerks, class one..... 9,600	
Duffy, John J..... Clerk, at \$1,700..... 991.67	7 clerks, at \$1,100 each..... 7,700	
Fuchs, W. R..... Clerk, at \$1,700..... 708.33	10 clerks, at \$1,000 each..... 10,000	
Cousins, A. R..... Clerk, at \$1,700..... 519.45	19 clerks, at \$800 each..... 15,200	
Helphenstine, jr., R. K..... Clerk, at \$1,700..... 1,175.83	27 clerks, at \$700 each..... 18,900	
Jones, W. Parker..... Clerk, class two..... 1,400.00	18 clerks, at \$600 each..... 10,800	
Duffy, J. J..... Clerk, class three..... 662.22	1 draftsman..... 2,000	
Strong, L. M..... Clerk, at \$1,500..... 1,500.00	2 draftsmen, at \$1,400 each.. 2,800	
Dutrow, B. H..... Clerk, at \$1,500..... 875.00	2 draftsmen, at \$1,200 each.. 2,400	
Mangan, W. J..... Clerk, at \$1,500..... 625.00	4 draftsmen, at \$1,000 each.. 4,000	
Swan, John S..... Clerk, class two..... 1,400.00	1 artist..... 1,000	
Moore, Felix T..... Clerk, class two..... 1,400.00		
Williams, Gross H..... Clerk, class two..... 516.39		
Rowden, C. H..... Clerk, at \$1,300..... 610.28		
Urbanowicz, John A..... Clerk, class one..... 148.06		
Wold, Oscar M..... Clerk, class one..... 1,200.00		
Simonson, Edith..... Clerk, class one..... 1,200.00		
Stump, William C..... Clerk, class one..... 1,200.00		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Forest Service, 1909, \$144,300—Continued.</i>		<i>Salaries, Forest Service, 1910, \$60,200—Cont'd.</i>	<i>Salaries, Forest Service, 1911, \$60,200—Cont'd.</i>
Whittleton, R. R.	Clerk, class one..... \$1,200.00	1 photographer..... \$1,400	1 clerk (decrease of 1, dropped as above)..... \$1,500.00
Young, Effie M.	Clerk, class one..... 1,200.00	1 photographer..... 1,200	1 clerk..... 1,320.00
Stockbridge, H. E.	Clerk, class one..... 1,133.33	1 photographer..... 1,000	2 clerks, at \$1,260 each..... 2,520.00
Bain, V. M.	Clerk, class one..... 500.00	4 messengers, at \$720 each.. 2,880	4 clerks, at \$1,200 each..... 4,800.00
Morris, Albert	Clerk, class one..... 700.00	2 messengers, at \$700 each.. 1,400	5 clerks, at \$1,080 each..... 5,400.00
Bentley, G. A.	Clerk, class one..... 700.00	3 messengers, at \$600 each.. 1,800	8 clerks, at \$1,020 each..... 8,160.00
Gage, C. E.	Clerk, class one..... 500.00	3 messengers, at \$400 each.. 1,200	10 clerks, at \$960 each..... 9,600.00
Ellis, Don Carlos	Clerk, class one..... 700.00	1 carpenter..... 1,000	17 clerks, at \$900 each (increase of 5). 15,300.00
Urbanowicz, John A.	Clerk, class one..... 500.00	1 carpenter..... 720	4 messengers, at \$660 each..... 2,640.00
Enoch, H. H.	Clerk, at \$1,100..... 1,100.00	3 watchmen, at \$700 each... 2,100	4 messengers, at \$360 each..... 1,440.00
Rector, L. B.	Clerk, at \$1,100..... 1,100.00	1 electrician..... 700	3 watchmen, at \$840 each..... 2,520.00
Stahnecker, P. S.	Clerk, at \$1,100..... 1,100.00	Total..... 127,000	Total..... 60,200.00
Moorman, T. M.	Clerk, at \$1,100..... 1,100.00	1 clerk (decrease of 1, dropped as above)..... \$1,500.00	NOTE 1.—One clerk, at \$1,320; 2 clerks, at \$1,260 each; 4 clerks, at \$1,200 each; 5 clerks, at \$1,080 each; 8 clerks, at \$1,020 each; 10 clerks, at \$960 each; 5 clerks, at \$900 each; 4 messengers, at \$660 each; 4 messengers, at \$360 each; and 3 watchmen, at \$340 each, were added, amounting to \$42,900. One hundred and thirty-six places were dropped, as per note above, amounting to \$127,000, making an apparent decrease of \$84,100, but deducting 2 clerks of class four and 1 clerk of class two, aggregating \$5,000, transferred to the Division of Accounts and Disbursements for the purpose of making the administrative examinations of the accounts and disbursements of the Forest Service, the actual decrease was \$79,100. This decrease in the appropriation was made necessary by the change in the organization of the Forest Service, under which six administrative districts were established in the West. This occasioned a reduction in the force of clerks in Washington, D. C., as employees at the headquarters of the administrative districts are paid from the lump fund for field expenses.
Neis, Claudius J.	Clerk, at \$1,100..... 1,063.34	1 clerk..... 1,320.00	
Gray, Percy S.	Clerk, at \$1,100..... 641.67	2 clerks, at \$1,260 each..... 2,520.00	
Quiggle, Edmund B.	Clerk, at \$1,100..... 453.33	4 clerks, at \$1,200 each..... 4,800.00	
Holland, George W.	Clerk, at \$1,100..... 424.72	5 clerks, at \$1,080 each..... 5,400.00	
Ruppel, Albert	Clerk, at \$1,100..... 397.22	8 clerks, at \$1,020 each..... 8,160.00	
White, Ethel M.	Clerk, at \$1,100..... 216.95	10 clerks, at \$960 each..... 9,600.00	
Curtis, Maury	Clerk, at \$1,000..... 1,000.00	17 clerks, at \$900 each (increase of 5). 15,300.00	
Echtermann, M. M.	Clerk, at \$1,000..... 1,000.00	4 messengers, at \$660 each..... 2,640.00	
Howes, John W.	Clerk, at \$1,000..... 1,000.00	4 messengers, at \$360 each..... 1,440.00	
McPherson, L. R.	Clerk, at \$1,000..... 1,000.00	3 watchmen, at \$840 each..... 2,520.00	
Seaton, S. F.	Clerk, at \$1,000..... 1,000.00	Total..... 60,200.00	
Sherman, W. F.	Clerk, at \$1,000..... 1,000.00		
Totten, Sarah G.	Clerk, at \$1,000..... 1,000.00		
Conway, L. T.	Clerk, at \$1,000..... 583.34		
Linton, H. B.	Clerk, at \$1,000..... 394.44		
Gerhart, H. B.	Clerk, at \$1,000..... 583.34		
Bectold, F. E.	Clerk, at \$1,000..... 355.55		
Childs, M. M.	Clerk, at \$1,000..... 36.11		
Gladmon, Percy L.	Clerk, at \$1,000..... 583.34		
Bradford, V. P.	Clerk, at \$1,000..... 405.55		
Cunningham, M. V.	Clerk, at \$900..... 900.00		
Emerson, N. E.	Clerk, at \$900..... 900.00		
Flanagan, Susanna	Clerk, at \$900..... 900.00		
Owen, Nina	Clerk, at \$900..... 900.00		
Pence, Z. F.	Clerk, at \$900..... 900.00		
Ramsaur, S. W.	Clerk, at \$900..... 900.00		
Wharton, G. W.	Clerk, at \$900..... 900.00		
Woodman, Ulah M.	Clerk, at \$900..... 900.00		
Gartrell, L. R.	Clerk, at \$900..... 375.00		
Hawkins, C. J.	Clerk, at \$900..... 525.00		
Holberg, H. J.	Clerk, at \$900..... 375.00		
McLaurin, S. L.	Clerk, at \$900..... 525.00		
Rancke, L. V.	Clerk, at \$900..... 620.00		
Gage, K. R.	Clerk, at \$900..... 162.50		
Kellerhouse, L. C.	Clerk, at \$900..... 312.50		
Sniffin, W. W.	Clerk, at \$900..... 487.50		
Gonter, C. H.	Clerk, at \$800..... 37.50		
Davidson, A. B.	Clerk, at \$800..... 800.00		
Jackson, Leona	Clerk, at \$800..... 800.00		
Judson, B. A.	Clerk, at \$800..... 800.00		
Pryor, A. A.	Clerk, at \$800..... 800.00		
Robinson, L. J.	Clerk, at \$800..... 800.00		
Shelton, R. McK.	Clerk, at \$800..... 800.00		
Barton, M. A.	Clerk, at \$800..... 791.11		
Williams, Katherine	Clerk, at \$800..... 782.22		
Gonter, C. H.	Clerk, at \$800..... 766.66		
Leech, E. B.	Clerk, at \$800..... 766.67		
Bowne, G. L.	Clerk, at \$800..... 633.33		
Stillwell, M. S.	Clerk, at \$800..... 166.67		
Goldsmith, G. N.	Clerk, at \$800..... 620.00		
Taylor, Jennie	Clerk, at \$800..... 168.89		
Gardner, B. G.	Clerk, at \$800..... 466.67		
Tonks, A. M.	Clerk, at \$800..... 333.33		
Knight, Mabel E.	Clerk, at \$800..... 466.67		
Huff, Nellie	Clerk, at \$800..... 333.33		
Warren, K. D.	Clerk, at \$800..... 466.67		
Felder, H. E.	Clerk, at \$800..... 333.33		
Hoffman, Ethel T.	Clerk, at \$800..... 500.00		
DeLoss, M. W.	Clerk, at \$800..... 299.99		
Hobgood, M. L.	Clerk, at \$800..... 324.44		
Farquhar, Faith	Clerk, at \$800..... 231.11		
Eisenstein, J. C.	Clerk, at \$800..... 236.95		
Zinssmeister, G. M.	Clerk, at \$800..... 491.11		
Kuntz, C. B.	Clerk, at \$800..... 275.55		
Ryan, Elizabeth	Clerk, at \$800..... 33.33		
Nelson, J. E.	Clerk, at \$800..... 420.00		
Baker, M. E.	Clerk, at \$800..... 200.00		
Imhoff, Lillie V.	Clerk, at \$800..... 122.22		
Steever, L. W.	Clerk, at \$800..... 46.67		
Anderson, L. L.	Clerk, at \$700..... 700.00		
Bauskett, Emily	Clerk, at \$700..... 700.00		
Carman, Elida M.	Clerk, at \$700..... 700.00		
Carpenter, H. F.	Clerk, at \$700..... 700.00		
Carier, Susie E.	Clerk, at \$700..... 700.00		
Irving, E. G.	Clerk, at \$700..... 700.00		
Miller, C. N.	Clerk, at \$700..... 700.00		
Quigley, M. E.	Clerk, at \$700..... 700.00		
Randal, G. H.	Clerk, at \$700..... 700.00		
Eisenstein, J. C.	Clerk, at \$700..... 291.66		
Rowzee, A. N.	Clerk, at \$700..... 408.34		
Jacobi, Lydia	Clerk, at \$700..... 291.66		
Richmond, R. L.	Clerk, at \$700..... 408.34		
Keating, E. F.	Clerk, at \$700..... 525.00		
Hadden, S. A.	Clerk, at \$700..... 171.11		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Salaries, Forest Service, 1909, \$144,300—Continued.		Salaries, Forest Service, 1910, \$60,300—Cont'd.	Salaries, Forest Service, 1911, \$60,200—Cont'd.
Kendig, L. L.	Clerk, at \$700.....	\$663.05	
Jett, E. N.		36.94	
Kimmel, N. M.		291.66	
McGraw, E. B.	Clerk, at \$700.....	408.34	
Linell, Ellen M.		291.66	
Coskery, H. Z.	Clerk, at \$700.....	408.34	
McDevitt, L. M.		291.66	
Simpson, M. K.	Clerk, at \$700.....	408.34	
Miner, C. C.		612.50	
Wallace, M. L.	Clerk, at \$700.....	85.56	
Smith, A. E.		456.95	
Zinssmeister, G. M.	Clerk, at \$700.....	231.38	
Stillwell, M. S.		525.00	
Armstrong, Kennett	Clerk, at \$700.....	143.89	
Walton, J. I.		602.77	
Johnston, F. E.	Clerk, at \$700.....	97.23	
Williams, L. A.		408.34	
Moore, Mary E.	Clerk, at \$700.....	291.66	
Daniel, Lena A.		291.66	
Steever, L. W.	Clerk, at \$700.....	367.50	
Seeley, Grace E.		40.83	
Deaderick, M. B.		437.51	
Goldsmith, G. N.	Clerk, at \$700.....	157.49	
Hoffman, Ethel T.		105.00	
Foote, L. M.		291.67	
Steely, Edna V.	Clerk, at \$700.....	291.66	
Heisley, L. M.		116.67	
Krause, L. A.		233.33	
Ryan, Elizabeth	Clerk, at \$700.....	427.78	
Beckham, M. V.		29.17	
Pennebaker, R. C.		291.66	
Gedney, S. E.	Clerk, at \$700.....	287.78	
Nugent, E. M.		103.06	
Decker, M. M.		68.05	
Igoe, Celestine		213.89	
Eisenstein, J. C.	Clerk, at \$700.....	199.45	
Chappel, E. C.		192.50	
Kerley, Ophelia	Clerk, at \$600.....	600.00	
Palmer, A. B.	Clerk, at \$600.....	600.00	
Eubank, J. E.	Clerk, at \$600.....	350.00	
Bell, Maud A.		250.00	
Hall, C. E.	Clerk, at \$600.....	350.00	
Asquith, Bertha W.		250.00	
Miller, Bertha R.	Clerk, at \$600.....	350.00	
Coskery, H. Z.		250.00	
Palisay, B.	Clerk, at \$600.....	350.00	
Frazer, F.		250.00	
Randall, E. M.	Clerk, at \$600.....	350.00	
Estes, Ida D.		250.00	
Tracy, S. V.	Clerk, at \$600.....	350.00	
Gedney, Sarah E.		250.00	
Johnston, F. E.		266.67	
Lyle, Ruth M.	Clerk, at \$600.....	250.00	
Wells, Mary I.		83.33	
Seely, Grace E.		315.00	
Kidwell, V. L.	Clerk, at \$600.....	250.00	
Flowers, Mary G.		35.00	
Beckham, M. V.		321.67	
Armstrong, Kennett	Clerk, at \$600.....	250.00	
O'Rourke, F. M.		21.67	
Hyatt, Helen		268.33	
Richmond, R. L.	Clerk, at \$600.....	226.67	
Edgerton, Daisy S.		81.67	
Wallace, M. L.		296.67	
Smith, Pearl R.	Clerk, at \$600.....	225.00	
Hodges, A. M.		71.67	
Jett, E. N.		318.33	
von der Linde, Alva	Clerk, at \$600.....	200.00	
Thomson, M. G.		40.00	
Parsons, Miriam		31.67	
Nugent, E. H.		261.67	
Colne, Harriet	Clerk, at \$600.....	150.00	
Foote, L. Marie		100.00	
Kuhn, Sarah E.		85.00	
Chappel, E. C.		250.00	
Brader, Lucy I.	Clerk, at \$600.....	183.33	
Winningham, Allie		100.00	
Igoe, Celestine		66.67	
Ryan, Elizabeth		208.33	
Armstrong, Kennett		176.67	
Herrell, B. M.	Clerk, at \$600.....	123.33	
Yates, Nellie		75.00	
Deaderick, May B.		16.67	
Simpson, Mary K.		250.00	
Chappel, E. C.		185.00	
Radelfinger, Blanche P.	Clerk, at \$600.....	95.00	
Ball, Rose Mary		45.00	
Hadden, S. A.		18.33	
Kolb, C. A.	Draftsman, at \$2,000.....	2,000.00	
Noel, J. S.	Draftsman, at \$1,400.....	1,400.00	
Brock, T. S.		816.67	
Borgfeldt, R. E. Lee	Draftsman, at \$1,400.....	583.33	
Haring, O. E.		500.00	
Noel, J. C.	Draftsman, at \$1,200.....	653.33	
Bradford, Fred D.		43.33	
Coleman, T. C.		500.00	
Trembley, G. T.	Draftsman, at \$1,200.....	700.00	
Fenton, K. J.	Draftsman, at \$1,000.....	1,000.00	

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Forest Service, 1909, \$144,300—Continued.</i>	<i>Salaries, Forest Service, 1910, \$60,200—Cont'd.</i>	<i>Salaries, Forest Service, 1911, \$60,200—Cont'd.</i>
Fowler, A. E. } Draftsman, at \$1,000. { 583.34		
Munce, S. W. } { 416.66		
De Valin, Ellen S. } Draftsman, at \$1,000. { 416.66		
Walsh, H. A. } { 583.34		
Hart, Esther H. } Draftsman, at \$1,000. { 908.33		
Habercom, E. A. } { 91.67		
Hoyle, A. E. } Artist, at \$1,000. { 1,000.00		
Shipp, E. S. } Photographer, at \$1,400. { 1,400.00		
Blum, A. S. } Photographer, at \$1,200. { 1,200.00		
Jones, C. C. } Photographer, at \$1,000. { 1,000.00		
Ellis, Maude. } Messenger, at \$720. { 720.00		
Sullivan, Jos. F. } Messenger, at \$720. { 720.00		
Stack, J. W. } Messenger, at \$720. { 720.00		
Locknane, J. M. } Messenger, at \$720. { 578.00		
Marmion, Bessie. } { 138.00		
Markwood, Wesley. } Messenger, at \$700. { 700.00		
Locke, Louisa K. } { 299.44		
Todd, Blanche. } Messenger, at \$700. { 289.72		
Goshen, Geo. W. } { 106.95		
Sudler, W. L. } Messenger, at \$600. { 600.00		
Munchmeyer, Fred S. } Messenger, at \$600. { 481.67		
Locknane, J. M. } { 118.33		
Adamson, Consuelo. } Messenger, at \$600. { 350.00		
Garrett, C. W. } { 250.00		
Downey, M. J. } Messenger, at \$400. { 400.00		
Spellbring, John A. } Messenger, at \$400. { 400.00		
McCreight, A. M. } Messenger, at \$400. { 321.11		
Munchmeyer, Fred S. } { 78.88		
Austin, C. T. } Carpenter, at \$1,000. { 1,000.00		
Cooksey, T. R. } Carpenter, at \$720. { 720.00		
Fowler, Geo. V. } Watchman, at \$700. { 700.00		
Fuchs, Robt. H. } Watchman, at \$700. { 700.00		
Walter, W. L. } Watchman, at \$700. { 700.00		
Lee, R. E. } Electrician, at \$700. { 700.00		
Total amount paid for salaries. 143,464.87		
Unexpended balance. 835.13		
Total amount of appropriation. 144,300.00		
<i>General expenses, Forest Service, 1909, \$3,151,900.</i>	<i>General expenses, Forest Service, 1910, \$3,986,000.</i>	<i>General expenses, Forest Service, 1911, \$4,708,500.</i>
To enable the Secretary of Agriculture to experiment and to make and continue investigations and report on forestry, National Forests, forest fires, and lumbering, * * * to investigate and test American timber and timber trees, and their uses, and methods for the preservative treatment of timber; to seek, through investigations and the planting of native and foreign species, suitable trees for the treeless regions; to erect necessary buildings: <i>Provided</i> , That the cost of any building erected shall not exceed five hundred dollars; to pay all expenses necessary to protect, administer, and improve the National Forests; and hereafter officials of the Forest Service designated by the Secretary of Agriculture shall, in all ways that are practicable, aid in the enforcement of the laws of the States or Territories with regard to stock, for the prevention and extinguishment of forest fires, and for the protection of fish and game, and with respect to National Forests, shall aid the other federal bureaus and departments on request from them, in the performance of the duties imposed on them by law; to ascertain the natural conditions upon and utilize the National Forests, * * * to transport and care for fish and game supplied to stock the National Forests or the waters therein; to employ fiscal and other agents, clerks, assistants, and other labor required in practical forestry and in the administration of National Forests, in the District of Columbia or elsewhere; * * * to collate, digest, report, illustrate, and print the results of experiments and investigations made by the Forest Service; to purchase law books to an amount not exceeding five hundred dollars, necessary supplies, apparatus, and office fixtures, and technical books and technical journals for officers of the Forest Service stationed outside of Washington; to pay freight, express, telephone, and telegraph charges; for electric light and power, fuel, gas, ice, washing towels, and official traveling and other necessary expenses; and for rent in the District of Columbia and elsewhere * * *		
Total for salaries and general expenses, Forest Service, three million two hundred and ninety-six thousand two hundred dollars.		
And there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of six hundred thousand dollars, to be expended as the Secretary of Agriculture may direct, for the construction and maintenance of roads, trails, bridges, fire lanes, telephone lines, cabins, fences, and other permanent improvements necessary for the proper and economical administration, protection, and development of the National Forests, 1909.		
Expenditures were as follows:	Allotted approximately as follows:	To be expended as follows:
Salaries in Washington. \$310,919.03	Salaries in Washington. \$226,114.21	Salaries in Washington. \$286,690.00
Salaries out of Washington. 1,957,579.68	Salaries out of Washington. 2,612,242.06	Salaries out of Washington. 2,813,600.00
Stationery. 32,188.46	Stationery. 55,000.00	Stationery. 83,561.00
Miscellaneous supplies, services, etc. 293,301.93	Miscellaneous supplies, services, etc. 403,656.44	Miscellaneous supplies, services, etc. 808,494.00
Furniture. 14,639.17	Furniture. 20,825.00	Furniture. 49,637.00
Fuel. 1,828.15	Fuel. 2,000.00	Fuel. 2,000.00
Freight. 28,250.78	Freight. 22,000.00	Freight. 19,000.00
Express. 8,470.78	Express. 8,000.00	Express. 6,000.00
Telegraph. 6,320.45	Telegraph. 6,000.00	Telegraph. 6,000.00
Telephone. 7,688.59	Telephone. 10,100.00	Telephone. 10,000.00
Rent. 90,365.31	Rent. 92,076.20	Rent. 90,000.00
Gas and electricity. 1,775.55	Gas and electricity. 2,000.00	Gas and electricity. 2,000.00
Apparatus, instruments, etc. 11,091.89		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>General expenses, Forest Service, 1909, \$3,151,900—Continued.</i>	<i>General Expenses, Forest Service, 1910, \$3,986,000—Continued.</i>	<i>General expenses, Forest Service, 1911, \$4,708,500—Continued.</i>
Expenditures were as follows—Continued.	Allotted approximately, as follows—Cont'd.	To be expended as follows—Cont'd.
Printing and binding..... \$1,656.92	Apparatus, instruments, etc... \$15,000.00	Apparatus, instruments, etc... \$24,518.00
Travel, station, and field expenses..... 293,765.85	Printing and binding..... 2,000.00	Printing and binding..... 2,000.00
Total..... 3,059,842.54	Travel, station, and field expenses..... 325,000.00	Travel, station, and field expenses..... 360,000.00
Advanced to temporary special district agents..... 59,212.65	Contingent..... 183,986.09	Contingent..... 145,000.00
Paid on account of cooperative work with other federal bureaus not distributed above..... 542.78	Total of appropriation.. 3,986,000.00	Total..... 4,708,500.00
Total expenditures to August 31, 1909..... 3,119,597.97		
Repayments, including reimbursements on account of cooperative work with other federal bureaus..... 15,202.21	Total for salaries and general expenses..... 4,046,200.00	Total for salaries and general expenses..... 4,768,700.00
Net expenditures..... 3,104,395.76		
Liabilities outstanding August 31, 1909, estimated..... 35,003.59		
Balance to be returned to the Treasury, estimated..... 12,500.65		
Total appropriation..... 3,151,900.00		
Total for salaries and general expenses..... 3,296,200.00		
Distributed among projects as follows:	Allotted to projects as follows:	To be expended on projects as follows:
<i>Salary and general expenses, Forest Service, \$3,296,200.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700.</i>
OFFICE OF THE FORESTER AND ASSOCIATE FORESTER.	OFFICE OF THE FORESTER AND ASSOCIATE FORESTER.	OFFICE OF THE FORESTER AND ASSOCIATE FORESTER.
General administration:	General administration:	General administration:
Salaries..... \$24,914.49	Salaries..... \$14,592.00	(Cost of this line of work provided for under other headings and under provision for use in the discretion of the Secretary of Agriculture, of not over 10 per cent of the total of all sums specifically appropriated under "General Expenses, Forest Service," and under "Improvement of the National Forests" for any of the purposes enumerated under "General Expenses, Forest Service.")
Travel and field expenses..... 2,658.97	Travel and field expenses..... 2,940.00	District reorganization: (No estimate.)
\$27,573.46	\$17,532.00	
District reorganization:	District reorganization: (No allotment.)	
Expenditures in establishing and fitting up district headquarters, shipment of office furniture and supplies, transportation of employees, and other expenses incident to reorganization of the Forest Service effective December 1, 1908..... 27,852.00	General inspection:	General inspection:
General inspection:	On December 1, 1908, the Forest Service was reorganized and six district headquarters established at Missoula, Mont.; Denver, Colo.; Albuquerque, N. Mex.; Ogden, Utah; San Francisco, Cal., and Portland, Oreg. The western inspection headquarters were then discontinued and the work of inspection was transferred in the main to the district foresters and their assistants, a limited number of inspectors being assigned to general inspection.	(See note above under General administration.)
Salaries..... \$26,553.73	Salaries..... \$7,400.00	
Travel, station, and field expenses..... 14,422.47	Travel, station, and field expenses..... 3,600.00	
Rent (to November 30, 1908, only)..... 1,015.50	11,000.00	
41,991.70		
Law:	Law:	Law:
Legal work in connection with matters affecting the forest service—	Salaries..... 26,376.38	(See note above under General administration.)
Salaries..... \$23,591.36	Travel and field expenses..... 6,812.50	
Travel and field expenses..... 2,990.30	Purchase of law books..... 500.00	
Purchase of law books..... 482.11	33,688.88	
27,063.77		
Information:	Information:	Information:
The planning of the lines along which the Forest Service makes known to the general public the practical results of its work and the supplying of information for publication.	Salaries..... \$11,480.00	Salaries..... \$12,340.00
Salaries..... \$8,749.17	Travel and field expenses..... 2,200.00	Travel and field expenses..... 1,350.00
Travel and other expenses..... 2,524.66	13,680.00	13,690.00
11,273.83		
Publication:	Publication:	Publication:
Preparation of results of studies for publication. Preparation of material for teachers and for school textbooks and the dissemination of forest information through educational circulars and public addresses. The upkeep of a mailing list. (The expenses of this section for the fiscal year 1909 also included the distribution of Forest Service publications and the purchase of an addressing machine.)	Salaries..... \$21,989.67	Salaries..... \$24,780.00
Salaries..... \$41,882.99	Travel and field expenses..... 2,653.55	Travel and field expenses..... 3,000.00
Travel, field, and station expenses..... 21,714.06	24,643.22	27,780.00
63,597.05		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
OFFICE OF THE FORESTER AND ASSOCIATE FORESTER—continued.	OFFICE OF THE FORESTER AND ASSOCIATE FORESTER—continued.	OFFICE OF THE FORESTER AND ASSOCIATE FORESTER—continued.
Dendrology: Investigations of the distribution of trees and forests, the identification of trees and woods, and other dendrological studies, including the study of commercial basket willows and distribution of cuttings.	Dendrology:	Dendrology:
Salaries..... \$13,295.56	Salaries..... \$6,015.33	Salaries..... \$12,020.00
Travel, field, and station expenses..... 2,370.21	Travel and field expenses..... 800.00	Travel and field expenses..... 2,500.00
15,665.77	6,815.33	14,520.00
Forest statistics: The collection in cooperation with the Census Bureau of annual statistics of forest products of the United States. The compilation of statistical data upon the uses of special forms of wood, exports and imports of forest products, forest fires, etc.	Forest statistics:	Forest statistics:
Salaries..... \$2,260.00	Salaries..... \$4,880.00	Salaries..... \$6,140.00
Travel and other expenses..... 912.75	Travel and field expenses..... 1,180.00	Travel and field expenses..... 1,400.00
3,172.75	6,060.00	7,540.00
Total, Office of the Forester and Associate Forester... 218,190.33	Total, Office of the Forester and Associate Forester.... 113,419.43	Total, Office of the Forester and Associate Forester (except as indicated in note under "General administration"..... 63,530.00
BRANCH OF OPERATION.	BRANCH OF OPERATION.	BRANCH OF OPERATION.
Charge of all work connected with the business organization and management of the Forest Service and National Forest work.		
General administration: Salaries..... \$10,436.67	General administration: Salaries..... \$9,860.00	General administration: (See note under "General administration," Office of the Forester and Associate Forester.)
Travel and field expenses..... 3,755.35	Travel and field expenses..... 3,500.00	
14,192.02	13,360.00	
Organization: Charge of the executive force on the National Forests. For administrative purposes the National Forests are grouped in six districts. This office has direct oversight of personnel, equipment, and expenditures. It also examines all matters of an administrative character prepared in the other offices, and forms the central agency by which the administration of the National Forests by all branches of the Service is brought together and harmonized. (The expenditures given here are from July 1 to November 30, 1908, only. The charges for the remainder of the year will be found under "Organization" in the various districts.)	Organization: (See District offices.)	Organization: (See District offices.)
Salaries..... \$5,230.52		
Travel and field expenses..... 11,293.93		
16,524.45		
Engineering: Expert advice and assistance on the ground in the construction of roads, trails, telephone lines, and other permanent improvements upon National Forests. (See also "Improvement of the National Forests." To November 30, 1908, only.)	Engineering. (See District offices.)	Engineering. (See District offices.)
Salaries..... \$4,400.00		
Rent, Ogden, Utah..... 185.78		
4,585.78		
Accounts: The conduct of the disbursements and receipts of the Forest Service, its bookkeeping, cost keeping by projects, and the preparation of all papers, necessary to appointments, promotions, leave, and similar matter affecting the personnel. (These charges represent the cost of "Accounts" for the whole Forest Service from July 1 to November 30, 1908, and the Washington headquarters office only from December 1, 1908, to June 30, 1909.)	Accounts (Washington headquarters): Salaries..... \$18,600.00	Accounts: (See note under "General administration," Office of the Forester and Associate Forester.)
Salaries..... \$32,781.92	Travel and field expenses..... 1,500.00	
Travel expenses..... 1,058.17	20,100.00	
33,840.09		
Maintenance: General supervision of the quarters occupied by the Washington office and of supplies and office equipment of the entire service. The office comprised the sections of Supplies, Stenography and Typewriting, Mail, Files, Quarters, and Purchase—	Maintenance: Supervision—Salaries..... 1,500.00	Maintenance: (See note under "General administration," Office of the Forester and Associate Forester.)
Supervision—Salaries..... 1,450.00	Supplies—Salaries..... 4,620.00	Supplies—
Supplies—	Stenography and typewriting—Salaries..... 22,375.00	(See note under "General administration," Office of the Forester and Associate Forester.)
To this section is intrusted the custody of the instruments, equipment, furniture, and office supplies of the service in Washington and in the field—	Mail—Salaries..... 2,200.00	Stenography and typewriting—
Salaries..... 7,075.66	Files—Salaries..... 2,250.00	(See note under "General administration," Office of the Forester and Associate Forester.)
Stenography and typewriting—General work—Salaries... 23,818.52	Quarters—Salaries..... \$19,780.00	
Mail—Receipt and distribution of mail—Salaries..... 2,612.50	Rent, Washington.. 25,675.00	
Files—Maintenance of the general files of the Forest Service—Salaries..... 4,464.72	Miscellaneous supplies..... 3,500.00	
	48,955.00	

118 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Salary and general expenses, Forest Service, \$3,296,200—Continued.	Salary and general expenses, Forest Service, \$4,046,200—Continued.	Salary and general expenses, Forest Service, \$4,768,700—Continued.
BRANCH OF OPERATION—continued.	BRANCH OF OPERATION—continued.	BRANCH OF OPERATION—continued.
Quarters—	Maintenance—Continued.	Maintenance—Continued.
Salaries of messengers, watchmen, char-		Mail—
women, and laborers..... \$20,474.48		(See note under "General ad-
Rent, Washington..... 30,803.93		ministration," Office of the
Miscellaneous supplies..... 6,202.44		Forester and Associate For-
\$57,480.85		ester.)
		Files—
		(See note under "General ad-
		ministration," Office of the
		Forester and Associate For-
		ester.)
		Quarters—
		(See note under "General ad-
		ministration," Office of the
		Forester and Associate For-
		ester.)
Purchase—Charge of all matters pertaining to the purchase	Purchase—	Purchase—(See note under "General
of supplies—	Salaries..... \$2,200.00	administration," Office of the
Salaries..... 1,863.90	(1) Furniture and	Forester and Associate For-
(1) Furniture and office equipment..... \$32,202.43	office equipment	ester.)
(2) Stationery and expendable office sup-	(Service)..... \$30,002.00	
plies..... 62,976.81	(2) Stationery and	(1) Furniture and of-
(3) Camp and field equipment and supplies.. 5,156.65	expendable office	fice equipment.... \$49,637.00
(4) Field instruments..... 14,415.67	plies (Service)..... 83,922.00	(2) Stationery and
114,751.56	(3) Field instruments	office supplies.... 83,561.00
	and equipment	(3) Field instruments
	(Service)..... 31,404.00	and equipment.... 77,924.00
	145,325.00	(4) Laboratory
		equipment and
		supplies..... 12,750.00
		\$223,872.00
Miscellaneous—	Miscellaneous—	Miscellaneous—
Telegraph (Service)..... 6,986.34	Telegraph (Service). 6,000.00	Freight (Service).... 19,000.00
Telephone (Washington)..... 1,365.17	Telephone (Wash-	Express (Service).... 6,000.00
Freight (Service)..... 37,371.50	ington)..... 1,100.00	25,000.00
Express (Service)..... 4,729.39	Freight (Washing-	(See also note under "General ad-
Advertising (Washington)..... 762.02	ton)..... 6,000.00	ministration," Office of the For-
51,214.42	Express (Washing-	ester and Associate Forester.)
(See also Districts for telephone and advertising.)	ton)..... 2,000.00	
	Advertising (Wash-	
	ington)..... 500.00	
	15,600.00	
Geography:	Geography:	Geography:
This office comprised the sections of Atlas, Alienation,		
Drafting, and Photography. By a system of cost keep-		
ing, \$59,321.43 of the expenditures incurred in the sec-		
tions of this office have been distributed and charged		
against the individual Forests on account of which the		
work was done, and figures aggregating this sum appear		
elsewhere in this statement as part of the cost of the For-		
ests concerned. The expenses shown here represent		
only work for the benefit of the National Forests and		
Forest Service in general and not properly chargeable		
against any particular Forest or group of Forests—		
Supervision—	Supervision—	Supervision—
Salaries and expenses..... 4,515.85	Salaries..... \$3,460.00	(Provided for under "Atlas.")
	Travel and field ex-	
	penses..... 500.00	
	3,960.00	
Atlas—	Atlas—	Atlas—
The graphic record, under a comprehensive and uni-	Salaries..... \$10,860.00	Salaries..... \$22,580.00
form system, of all data obtained by the Forest Service	Travel and field ex-	Travel and field ex-
and all business done upon National Forests—	penses and Atlas	penses and Atlas
Salaries and expenses..... 7,935.19	supplies..... 11,500.00	supplies..... 16,700.00
	22,360.00	39,280.00
	5,690.00	
Alienation—	Alienation—Salaries.....	Alienation—
The examination of the records of the General Land		(See note under "General admin-
Office to determine the public, state, or private owner-		istration," Office of the Forester
ship of lands within National Forests—		and Associate Forester.)
Salaries and expenses..... 3,574.84		
Drafting—	Drafting—	Drafting—
All classes of drafting work required by the various		(Provided for above under
offices of the Forest Service and for use in the adminis-		"Atlas.")
tration of the National Forests.		
Salaries..... 13,593.19	Salaries..... 16,615.83	
Photography—	Photography—	Photography—
The conduct of all laboratory work in photography in	Salaries..... \$9,040.00	Salaries..... \$9,800.00
the Forest Service..... 10,741.41	Equipment and sup-	Equipment and sup-
	plies..... 10,000.00	plies..... 11,768.00
	19,040.00	21,568.00
Total, Branch of Operation, Washington..... 374,227.45	Total, Branch of Operation,	Total, Branch of Operation,
	Washington..... 346,150.83	Washington, (except as
		indicated by reference to
		note under "General ad-
		ministration," Office of the
		Forester and Associate
		Forester)..... 309,720.00

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE. 119

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
BRANCH OF GRAZING.	BRANCH OF GRAZING.	BRANCH OF GRAZING.
Charge of all grazing business of the Forest Service; establishment of grazing periods and fees; division of range between different classes of stock and between the users of grazing privileges; range improvement studies and work.		
General administration:	General administration:	General administration:
Salaries..... \$10,997.19	Salaries..... \$8,420.00	(See note under "General administration," Office of the Forester and Associate Forester.)
Travel and field expenses..... 4,886.42	Travel and field expenses..... 3,880.00	
\$15,883.61	\$12,300.00	
Grazing studies:	Grazing studies:	Grazing studies:
Studies of the National Forest range and of forage plants and investigations of best methods for their use and improvement.		
Salaries..... \$9,786.65	Salaries..... \$5,900.00	Salaries..... \$8,120.00
Travel and field expenses..... 8,183.98	Travel and field expenses..... 5,800.00	Travel and field expenses..... 3,700.00
17,970.64	11,700.00	\$11,820.00
Permits:		
The conduct of all business relating to grazing permits, amendments and cancellations, refunds, grazing bonds, and advertisements (to Nov. 30, 1908, only).		
Salaries..... 1,575.55		
Total, Branch of Grazing, Washington..... 35,429.80	Total, Branch of Grazing, Washington..... 24,000.00	Total, Branch of Grazing (except as indicated by reference to note under "General administration," Office of the Forester and Associate Forester)..... 11,820.00
BRANCH OF SILVICULTURE.	BRANCH OF SILVICULTURE.	BRANCH OF SILVICULTURE.
Charge of all technical work connected with the management of national and private forests, including the cutting of timber, reforestation—artificial and natural—and experimental work.		
General administration:	General administration:	General administration:
Salaries..... \$9,522.66	Salaries..... \$6,980.00	(See note under "General administration," Office of the Forester and Associate Forester.)
Travel and field expenses..... 2,973.43	Travel and field expenses..... 2,000.00	
\$12,496.09	\$8,980.00	
Silvics:	Silvics:	Silvics:
This office investigates scientific problems underlying the practical management of forest lands. Its work includes field studies, the establishment and maintenance of forest experiment stations, the compilation of forest data, and the building up and care of the Forest Service library and the branch libraries in the field.		
Supervision and general investigations in Eastern United States—	Supervision and general investigations in Eastern United States—	Eastern forest studies—
Salaries..... \$12,018.16	Salaries..... \$10,137.22	Salaries..... \$16,800.00
Travel and field expenses..... 2,708.44	Travel and field expenses..... 5,380.00	Travel and field expenses..... 6,300.00
14,726.60	15,517.22	\$23,100.00
Field studies—	Field studies—	Field studies—
Investigations of the distribution, rate of growth, volume and yield, and habits of the principal forest trees in the United States, the relation of forests to stream-flow and climate, and the conditions necessary to secure natural reforestation of denuded land in order to furnish information to private timberland owners, on request, and to Forest officers. (To November 30, 1908, only.)	Provided for under District offices.)	(Provided for under District offices.)
Salaries..... \$6,489.07		
Travel and field expenses..... 5,819.57		
12,308.64		
Purchase of books for field libraries..... 2,062.21	Purchase of books for field libraries 3,000.00	Purchase of books for field libraries—
		(See note under "General administration," Office of the Forester and Associate Forester.)
Computing—	Computing—	Computing—
(See Branch of Products, Wood utilization.)	Work of this section described in 1909 column under "Computing," Branch of Products, Wood utilization.	
	Salaries..... 8,387.78	Salaries..... 13,360.00
Library—	Library—	Library—
(Not carried as a separate section for 1909.)	The maintenance and arrangement for effective use of forest literature comprising the Forest Service library, including the photograph collection. Record of books in branch libraries in the field.	
	Salaries..... 4,060.00	Salaries..... 4,020.00

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
BRANCH OF SILVICULTURE—continued.	BRANCH OF SILVICULTURE—continued.	BRANCH OF SILVICULTURE—continued.
Reconnaissance— Studies to determine how much timber is on the National Forests, and how much may be cut and under what methods, in order to use their timber resources fully and to maintain an ample future supply (to November 30, 1908, only)— Salaries..... \$8,123.28 Travel and field expenses..... 6,740.56 \$14,863.84	Reconnaissance— (Provided for under District offices.)	Reconnaissance— (Provided for under District offices.)
State and Private Cooperation: Conduct of studies of forest conditions in cooperation with States, to determine the best forest policy for each State to follow, and of studies for the conservative management of forest lands belonging to States and to private owners. Also the preparation of planting plans for private owners, the assistance by correspondence in establishing forest plantations, and experimental planting in cooperation with state and educational institutions. Salaries..... \$22,678.93 Travel and field expenses..... 13,009.89 35,688.82 (Additional expenses to the amount of \$14,138.57 were paid from contributed cooperative funds. See also statements of District expenses.)	State and Private Cooperation: (See note below under "Total Branch of Silviculture.") Salaries..... \$16,475.00 Travel and field expenses..... 3,325.00 \$19,800.00	State and Private Cooperation: (See note below under "Total Branch of Silviculture.") Salaries..... \$31,360.00 Travel and field expenses..... 8,950.00 \$40,310.00
Federal Cooperation: Cooperative work with other branches of the Federal Government which have control of forest lands or lands needing reforestation. Salaries..... \$16,520.25 Travel and field expenses..... 8,943.68 Total..... 25,463.93 Less amounts repaid by other federal branches..... 14,152.50 11,311.43	Federal Cooperation: (See note below under "Total Branch of Silviculture.") Salaries..... \$5,110.00 Travel and field expenses..... 1,300.00 6,410.00	Federal Cooperation: (See note below under "Total Branch of Silviculture.") Salaries..... \$23,580.00 Travel and field expenses..... 6,500.00 30,080.00
Timber Sales— Supervising and assisting local Forest officers in disposing of National Forest timber, both under sale and for free use (to November 30, 1908, only). (\$12,350.96 of the expenses of this section have been distributed and charged against the individual Forests on whose account the work was performed, and amounts making up this sum appear elsewhere as a part of the cost of the Forests concerned. The amount shown here represents only general inspection of timber sales and clerical work which it is impracticable to charge against any particular Forest.) Salaries..... \$8,154.71 Travel and field expenses..... 719.96 8,874.67	Timber Sales— (This work now attended to in the District offices.)	Timber Sales— (This work now attended to in the District offices.)
Forest Planting— The preparation of plans for tree planting and tree-seed sowing on National Forests and the rendering of assistance to local Forest officers in carrying them out (July 1 to November 30, 1908, only). (\$10,521.95 of the expenses of this section have been distributed and charged against the individual Forests on whose account the work was performed, and amounts making up this sum appear elsewhere as a part of the cost of the Forests concerned. The amount shown here represents general planting work not properly chargeable against any particular Forest. Salaries and expenses..... 5,139.66 Total, Branch of Silviculture, Washington..... 117,471.55	Forest Planting— (This work now attended to in the District offices.) Total, Branch of Silviculture, Washington..... 66,155.00	Forest Planting— (This work now attended to in the District offices.) Total, Branch of Silviculture, Washington (except as indicated in reference to note under "General administration," Forester).... 110,870.00 (See note in 1910 column.)
BRANCH OF PRODUCTS.	BRANCH OF PRODUCTS.	BRANCH OF PRODUCTS.
Charge of experimental and statistical investigations which have as their object the more economical use of the products of the forest. General administration..... \$7,751.66 Travel and field expenses..... 2,293.33 10,044.99	General Administration: Salaries..... \$6,060.00 Travel and field expenses..... 3,530.00 \$9,590.00	General Administration: (See note under "General administration," Forester.)
Wood Utilization: This office comprised the sections of Computing, Wood Chemistry, Wood Distillation, Pulp Woods, Paper Tests, Turpentinizing Studies, and Wood Uses.	Wood Utilization: (This office was reorganized on July 1, 1909, a part of the work being transferred to other offices and the remainder combined with Supervision of Wood Utilization.)	Wood Utilization: (See note in column for 1910.)

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$3,048,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
BRANCH OF PRODUCTS—continued.	BRANCH OF PRODUCTS—continued.	BRANCH OF PRODUCTS—continued.
Wood Utilization—Continued.	Wood Utilization—Continued.	Wood Utilization—Continued.
Supervision—	Supervision and Studies—	Supervision and Studies—
Salaries..... \$3,933.32	Salaries..... \$8,120.00	Salaries..... \$22,980.00
Travel and field expenses..... 1,199.71	Travel and field expenses..... 4,220.00	Travel and field expenses..... 9,200.00
\$5,133.03	\$12,340.00	\$32,180.00
Computing—	Computing—	Computing—
Working up tables of volume, growth, form, and yield of forest trees. Calculating tests of the strength of timber and miscellaneous compilations.	(See "Computing" Silvics.)	(See 1910 column.)
Salaries..... \$12,530.86		
Travel and other expenses..... 287.82		
12,818.68		
Wood Chemistry—	Wood Chemistry—	Wood Chemistry—
Analysis of the various wood preservatives used in experimental work and supervision of the work in wood distillation and wood-pulp tests and paper tests—	(See "Chemistry" office of "Laboratory," Madison.)	(See 1910 column.)
Salaries..... \$3,820.00		
Travel and station expenses..... 427.30		
4,247.30		
Wood Distillation—	Wood Distillation—	Wood Distillation—
Investigations to determine possibilities of securing valuable by-products from wood by distillation—	(See "Chemistry" office of "Laboratory," Madison.)	(See 1910 column.)
Salaries..... \$875.01		
Travel and station expenses..... 319.29		
1,194.30		
Pulp Woods—	Pulp Woods—	Pulp Woods—
Experiments to test the value of various kinds of wood for pulp.	(See "Chemistry" office of "Laboratory," Madison.)	(See 1910 column.)
Salaries..... \$3,910.83		
Travel, field, and station expenses..... 466.69		
4,377.52		
Paper Tests—	Paper Tests—	Paper Tests—
(See appropriation for "Paper tests.")	(See 1909 column.)	(See 1909 column.)
Turpentine Studies—	Turpentine Studies—	Turpentine Studies—
(See also appropriation: "Naval Stores Industry.")	(See "Chemistry" office of "Laboratory," Madison.)	(See 1910 column.)
Field and station expenses..... 385.94		
Wood Uses—	Wood Uses—	Wood Uses—
Supervision of timber-testing laboratories in cooperation with Yale and Purdue universities; studies of wood-using industries, of wood used in manufacture, and of means of utilizing wood waste.	(See "Supervision and Studies" Wood Utilization and "Timber Tests" under "Laboratory," Madison.)	(See 1910 column.)
Salaries..... \$18,570.79		
Travel, field, and station expenses..... 11,875.37		
30,446.16		
Wood Preservation:	Wood Preservation:	Wood Preservation:
This office comprised the sections of Eastern Work, Research, and National Forest Timbers.	(On July 1, 1909, Wood Preservation was discontinued as a separate office, the work being transferred to the office of "Laboratory," Madison.)	(See 1910 column.)
Supervision—		
Salaries..... \$4,716.68		
Travel and field expenses..... 1,686.13		
6,402.81		
Eastern Work—		
Studies to ascertain the cheapest and most efficient preservatives, processes, and types of plants for the treatment of timbers used by railroads, mining companies, telegraph and telephone companies, and other users of structural timber. Also studies to ascertain the most practical method for the treatment of fence posts, shingles, and other timbers used on the farm.		
Salaries..... \$5,497.25		
Travel, field, and station expenses..... 2,806.66		
8,303.91		
(\$9,368.24 additional expenses of this work paid from cooperative contributed funds.)		
Research—	Research—	Research—
Conduct of the purely investigative work of the office of Wood Preservation. This section carries on investigations into the fundamental principles underlying wood preservation. The results are then transferred to the field and tested under more commercial conditions.	(See 1909 column.)	(See 1909 column.)
Salaries..... \$2,488.80		
Travel, field, and station expenses..... 5,769.49		
8,258.29		
Timber Treatment—		
Studies to ascertain the most profitable methods for utilizing the timber both dead and green on the National Forests so far as such methods relate to wood preservation. Also experiments to ascertain what classes of timber should be treated and how treated most profitably.		
(The expenses on account of this work will be found in the statement of District 2 expenditures, under "Products.")		
	Laboratory, Madison:	Laboratory, Madison:
	This office comprises the sections of Chemistry, Technology, Wood Preservation, Timber Tests, and Maintenance.	(See 1910 column.)
	Supervision—	Supervision—
	Salaries..... \$4,760.00	(See note under "General Administration" Forester.)
	Travel, field, and station expenses..... 1,200.00	
	Equipment, supplies, etc..... 5,500.00	
	11,460.00	

122 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Salary and general expenses, Forest Service, \$3,296,200—Continued.	Salary and general expenses, Forest Service, \$4,046,200—Continued.	Salary and general expenses, Forest Service, \$4,768,700—Continued.
BRANCH OF PRODUCTS—continued.	BRANCH OF PRODUCTS—continued.	BRANCH OF PRODUCTS—continued.
Wood Preservation—Continued.	Laboratory, Madison—Continued.	Laboratory, Madison—Continued.
	Chemistry—	Wood Pulp and Distillation Studies—
	(See "Wood Chemistry," "Wood Distillation," and "Pulp Woods" under Wood Utilization, 1909 column.)	
	Salaries..... \$7,200.00	Salaries..... \$19,880.00
	Travel, station, and field expenses..... 2,590.00	Travel, station, and field expenses..... 5,800.00
	\$9,790.00	\$25,680.00
	Technology—	Technology—
	Salaries..... 7,500.00	Salaries..... 11,300.00
	Travel and field expenses..... 600.00	Travel, station, and field expenses..... 3,200.00
	8,100.00	14,500.00
	Preservation—	Preservation—
	(See 1909 column "Eastern Work" and "Research" under Wood Preservation.)	
	Salaries..... \$9,130.00	Salaries..... 20,160.00
	Travel, field, and station expenses..... 3,500.00	Travel, field, and station expenses..... 8,200.00
	12,630.00	28,360.00
	Timber Tests—	Timber Tests—
	(See "Wood Uses" under Wood Utilization, 1909 column.)	
	Salaries..... \$6,400.00	Salaries..... 14,240.00
	Travel and field expenses..... 922.88	Travel, field, and station expenses..... 1,900.00
	7,322.88	16,140.00
	Maintenance—	Maintenance—
	Salaries..... 9,480.00	(See note under "General administration," Office of the Forester and Associate Forester.)
	Expenses..... 500.00	Total, Branch of Products, Washington..... 116,860.00
	9,980.00	
Total, Branch of Products, Washington..... \$91,613.02	Total, Branch of Products, Washington..... 81,212.88	(NOTE.—Increase due to establishment of office of Wood Utilization at Chicago, Ill., and a general Forest Products Laboratory in cooperation with the University of Wisconsin at Madison, Wis.)
		Officers and clerks specifically provided for—
		Salaries..... 60,200.00
DISTRICT OFFICES.	DISTRICT OFFICES.	DISTRICT OFFICES.
The National Forests were organized on December 1, 1908, into six districts with headquarters at Missoula, Mont.; Denver, Colo.; Albuquerque, N. Mex.; Ogden, Utah; San Francisco, Cal., and Portland, Oreg. Each district office is in charge of a District Forester. There is also an Assistant District Forester and offices of Grazing, Products, Silviculture, and Operation. All ordinary business connected with National Forest administration not handled by Forest Supervisors is cared for by the district offices. Matters of exceptional importance only are referred to Washington.		
DISTRICT 1.	DISTRICT 1.	DISTRICT 1.
(Headquarters, Missoula, Mont.)		
This district includes Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.		
OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.
Supervision:	General contingent..... \$27,125.99	(See note under "General administration," Office of the Forester and Associate Forester.)
Salaries..... \$2,783.34	Supervision:	
Travel and field expenses..... 663.55	Salaries..... \$4,750.00	
\$3,446.89	Travel and field expenses..... 1,600.00	
Law:	6,350.00	
(See "Law" under Office of the Forester and Associate Forester):	Law:	
Salaries..... \$1,200.00	Salaries..... 4,650.00	
Travel and field expenses..... 682.30	Travel and field expenses..... 1,600.00	
1,882.30	6,250.00	
	Forest assistants:	
	Salaries..... 4,250.00	
	Travel expenses..... 443.70	
	4,693.70	

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE. 123

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
<i>Salary and general expenses, Forest Service, \$3,296,000—Continued.</i>					<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>				<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 1—Continued.					DISTRICT 1—Continued.				DISTRICT 1—Continued.				
OPERATION.					OPERATION.				OPERATION.				
(See "Operation," Washington.)									(See note under "General administration," Office of the Forester and Associate Forester.)				
Supervision:					Supervision:								
Salaries.....				\$2,025.01	Salaries.....	\$7,900.00							
Travel and field expenses.....				432.62	Travel and field expenses.....	3,029.20							
				2,457.63		10,929.20							
Organization:					Organization:								
(See "Organization," under "Operation," Washington.)					Expenses.....	1,451.95							
Salaries.....				\$525.00	Ranger schools.....	1,500.00							
Travel and field expenses.....				499.71									
				1,024.71									
Forests.	Salaries.	Expenses.	Fire.	Total.	Forests.	Salaries.	Expenses.	Total.	Forests.	Salaries.	Expenses.	Planting.	Total.
Absaroka, Mont.....	\$10,063.31	\$3,788.37	\$2.50	\$13,856.18	Absaroka.....	\$12,800.00	\$1,816.00	\$14,616.00	Absaroka.....	\$17,870	\$2,974		\$20,844
Beartooth, Mont.....	7,736.24	1,837.24		9,573.48	Beartooth.....	10,325.00	1,295.00	11,620.00	Beartooth.....	15,120	2,179		17,299
Beaverhead, Mont.....	12,177.46	1,385.98		13,563.44	Beaverhead.....	19,200.00	1,550.00	20,750.00	Beaverhead.....	28,800	3,037		31,837
Bitterroot, Mont.....	11,601.93	3,894.27	25.35	15,521.55	Bitterroot.....	21,500.00	3,019.00	24,519.00	Bitterroot.....	28,130	3,261		31,391
Blackfeet, Mont.....	18,212.82	3,577.86	273.72	22,064.40	Blackfeet.....	24,240.00	1,790.00	26,030.00	Blackfeet.....	35,830	2,329		38,159
Cabinet, Mont.....	9,399.16	2,431.52	3,674.36	15,505.04	Cabinet.....	12,800.00	1,058.00	13,858.00	Cabinet.....	18,770	2,373		21,143
Clearwater, Idaho.....	16,962.14	2,232.09	1,103.27	20,297.50	Clearwater.....	25,000.00	1,350.00	26,350.00	Clearwater.....	37,980	3,125		41,105
Coeur d'Alene, Idaho.....	22,585.72	7,672.70	13,067.01	43,325.43	Coeur d'Alene.....	34,320.00	5,910.00	40,230.00	Coeur d'Alene.....	40,760	5,216		45,976
Custer, Mont.....	5,203.33	1,573.36		6,776.69	Custer.....	7,069.45	1,235.00	8,304.45	Custer.....	11,450	1,397		12,847
Dakota, N. Dak.....		236.87		236.87	Dakota.....				Dakota.....				
Deer Lodge, Mont.....	19,429.77	435.79	133.00	24,998.56	Deer Lodge.....	23,266.67	4,765.00	28,031.67	Deer Lodge.....	37,260	3,948		41,208
Flathead, Mont.....	16,340.16	2,546.72	120.06	19,006.94	Flathead.....	21,700.00	1,531.00	23,231.00	Flathead.....	33,450	2,380		35,830
Gallatin, Mont.....	15,251.07	2,715.39	61.27	18,027.73	Gallatin.....	14,650.00	1,321.00	15,971.00	Gallatin.....	24,130	2,464		26,594
Helena, Mont.....	13,488.34	7,224.50	1,192.74	21,905.58	Helena.....	20,470.00	5,520.00	25,990.00	Helena.....	27,340	3,568	\$3,600	34,508
Jefferson, Mont.....	18,272.79	3,061.65	260.70	23,595.14	Jefferson.....	19,700.00	2,410.00	22,110.00	Jefferson.....	28,070	3,306	2,625	34,001
Kaniksu, Idaho.....	9,128.67	4,941.64	3,617.71	17,688.02	Kaniksu.....	15,650.00	2,563.00	18,213.00	Kaniksu.....	24,820	3,628		28,448
Kootenai, Mont.....	15,990.24	3,663.88	837.31	20,491.43	Kootenai.....	19,088.50	2,575.50	21,664.00	Kootenai.....	28,070	2,564		30,634
Lewis and Clark, Mont.....	8,170.28	1,269.98	36.25	9,476.51	Lewis and Clark.....	9,200.00	991.00	10,191.00	Lewis and Clark.....	15,220	2,206		28,952
Lolo, Mont.....	11,985.83	2,776.89	582.82	15,345.54	Lolo.....	18,040.00	3,336.00	21,376.00	Lolo.....	25,750	3,202		34,426
Madison, Mont.....	10,237.92	2,085.80	13.75	12,337.47	Madison.....	12,795.00	2,647.00	15,442.00	Madison.....	19,920	2,200	2,625	24,745
Marquette, Mich.....		379.23		379.23	Marquette.....				Marquette.....	2,050	355		2,405
Michigan, Mich.....		469.15		469.15	Michigan.....	2,625.00	400.00	3,025.00	Michigan.....	3,275	469		3,744
Minnesota, Minn.....	9,682.50	4,015.68	351.67	14,049.85	Minnesota.....	13,050.00	1,200.00	14,250.00	Minnesota.....	21,560	2,873		24,433
Missoula, Mont.....	8,825.28	6,953.32	18.50	15,797.10	Missoula.....	21,622.50	2,073.50	23,696.00	Missoula.....	31,120	3,384		34,504
Nezperce, Idaho.....	8,751.68	2,148.30	170.22	11,070.20	Nezperce.....	16,300.00	1,250.00	17,550.00	Nezperce.....	25,870	2,637		28,507
Pend Oreille, Idaho.....	8,967.49	5,055.18	6,159.00	20,181.67	Pend Oreille.....	16,373.05	3,327.50	19,700.55	Pend Oreille.....	23,670	3,492		27,162
Sioux, Mont.....	5,424.50	1,959.95		7,384.45	Sioux.....	6,840.00	4,335.00	11,175.00	Sioux.....	6,900	2,019	2,000	10,919
Superior, Minn.....	1,335.28	1,303.42		2,638.70	Superior.....	9,000.00	700.00	9,700.00	Superior.....	17,170	2,209		19,379
Total.....	296,225.91	88,636.73	31,701.21	416,563.85	Total.....	427,625.17	59,968.50	487,593.67	Total.....	630,355	72,795	10,850	714,000
					Fire (not distributed above).....			10,000.00					
					Total.....			497,593.67					
Accounts (see "Accounts," Washington):					Accounts:				Accounts:				
Salaries.....				\$3,898.34	Salaries.....	\$7,037.50			(See note under "General administration," Office of the Forester and Associate Forester.)				
Travel expenses.....				223.13	Travel expenses.....	750.00			Boundaries:				
				\$4,121.47		\$7,787.50			(See note under "General administration," Office of the Forester and Associate Forester.)				
Occupancy—Salaries and expenses:					Boundaries:								
Supervision.....				41.80	Salaries.....	1,341.66							
Boundaries.....				22.21									
Settlement.....				447.44									
Claims.....				67.66									
				579.11									
(NOTE.—\$8,028.10 of the expenses of Occupancy have been distributed and charged against the Forests on account of which the work was performed. The charges here represent only general work not properly chargeable against any particular Forest.)													
Maintenance and miscellaneous:					Maintenance and miscellaneous:				(See note under "General administration," Office of the Forester and Associate Forester.)				
Salaries.....				6,750.01	Salaries.....	\$7,912.50							
Rent.....				4,760.00	Rent.....	6,657.00							
Telephone.....				325.00	Telephone.....	752.00							
Supplies.....				774.95	Supplies.....	500.00							
Advertising.....				425.00	Advertising.....	1,500.00							
Express.....				87.65									
				13,122.61				17,321.50					
SILVICULTURE.					SILVICULTURE.				SILVICULTURE.				
Supervision:					Supervision:				For silvicultural and other investigations within National Forests necessary for tree planting, for the reproduction of existing forests, and the regulation of cutting:				
Salaries.....				\$2,450.01	Salaries.....	\$4,200.00			Salaries.....	\$11,300.00			
Travel and field expenses.....				552.40	Travel and field expenses.....	1,000.00			Travel, field, and station expenses.....	5,400.00			
				3,002.41		5,200.00							16,700.00
Timber sales:					Planting:								
Salaries and expenses.....				260.70	Salaries.....	1,587.50							
Planting:					Travel, field, and station expenses.....	600.00							
Salaries and expenses.....				404.65				2,187.50					

124 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
Salary and general expenses, Forest Service, \$3,296,200—Continued.					Salary and general expenses, Forest Service, \$4,046,200—Continued.				Salary and general expenses, Forest Service, \$4,768,700—Continued.				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 1—Continued.					DISTRICT 1—Continued.				DISTRICT 1—Continued.				
SILVICULTURE—continued.					SILVICULTURE—continued.				SILVICULTURE—continued.				
Silvics:					Cooperation:				(See note under "General administration," Office of the Forester and Associate Forester.)				
Salaries and expenses.....				\$400.00	Salaries.....		\$15,058.05						
(NOTE.—The greater part of the expenses of Timber sales, Planting, and Silvics has been distributed and charged against the Forests on account of which the work was performed. The charges here represent only general work not properly chargeable against any particular Forest.)					Travel and field expenses.....		5,241.95	\$20,300.00					
GRAZING.					GRAZING.				GRAZING.				
Salaries.....				\$3,069.17	Salaries.....		\$4,400.00						
Travel, field, and station expenses.....				388.83	Travel and field expenses.....		1,600.00	6,000.00					
				3,458.00									
PRODUCTS.					PRODUCTS.				PRODUCTS.				
Salaries.....				\$1,459.18	(No allotment.)				(No provision here.)				
Travel, field, and station expenses.....				362.45									
				1,821.63									
Total, District 1.....				452,545.96	Total, District 1.....		616,032.67		Total, District 1 (except as indicated by reference to note under "General administration," Office of the Forester and Associate Forester).....			\$730,700.00	
DISTRICT 2.					DISTRICT 2.				DISTRICT 2.				
(Headquarters, Denver, Colo.)													
This district includes Colorado, Wyoming, South Dakota, Nebraska, and Western Kansas.													
OFFICE OF DISTRICT FORESTER.					OFFICE OF DISTRICT FORESTER.				OFFICE OF DISTRICT FORESTER.				
Supervision:					General contingent.....				(See note under "General administration," Office of the Forester and Associate Forester.)				
Salaries.....				\$3,091.68	Supervision:		\$5,300.00						
Travel and field expenses.....				757.01	Salaries.....		2,000.00						
				\$3,848.69	Travel and field expenses.....			7,300.00					
Law:					Law:				Law:				
Salaries.....				1,661.66	Salaries.....		4,225.00						
Travel and field expenses.....				766.58	Travel and field expenses.....		1,675.00	5,900.00					
				2,428.24									
OPERATION.					OPERATION.				OPERATION.				
Supervision:					Supervision:				(See note under "General administration," Office of the Forester and Associate Forester.)				
Salaries.....				\$1,808.34	Salaries.....		\$3,100.00						
Travel and field expenses.....				525.00	Travel and field expenses.....		1,500.00	4,600.00					
				2,333.34									
Organization:					Organization:				Organization:				
Salaries.....				525.00	Salaries.....		900.00						
Travel and field expenses.....				998.09	Travel and field expenses.....		1,800.00	2,700.00					
				1,523.09									
Forests.	Salaries.	Ex-penses.	Fire.	Total.	Forests.	Salaries.	Ex-penses.	Total.	Forests.	Salaries.	Ex-penses.	Plant-ing.	Total.
Arapaho, Colo.....	\$7,374.57	\$2,933.31	\$150.60	\$10,458.48	Arapaho.....	\$14,531.67	\$3,056.00	\$17,587.67	Arapaho.....	\$18,300	\$3,260		\$21,560
Battlement, Colo.....	8,479.99	2,022.62		10,502.61	Battlement.....	10,756.40	1,213.00	11,969.40	Battlement.....	14,500	1,200		15,700
Bighorn, Wyo.....	17,737.76	2,717.43	177.25	20,632.44	Bighorn.....	21,618.33	4,931.00	26,549.33	Bighorn.....	29,830	2,408		32,238
Black Hills, S. Dak.....	22,400.53	9,450.29	1,244.10	33,094.92	Black Hills.....	25,766.66	5,771.35	31,538.01	Black Hills.....	37,150	3,596	\$4,000	44,746
Bonneville, Wyo.....	12,865.27	1,646.67		14,511.94	Bonneville.....	15,210.00	1,727.00	16,937.00	Bonneville.....	20,500	2,322		22,822
Cheyenne, Wyo.....	13,678.59	9,808.26	40.44	23,527.29	Cheyenne.....	18,600.00	8,260.00	26,860.00	Cheyenne.....	19,750	8,600		28,350
Cochetopa, Colo.....	8,673.89	2,159.25		10,833.14	Cochetopa.....	11,200.00	1,438.90	12,638.90	Cochetopa.....	16,000	1,704		17,704
Gunnison, Colo.....	10,292.50	2,831.62		13,124.12	Gunnison.....	12,683.33	2,187.00	14,870.33	Gunnison.....	18,550	2,036		20,586
Hayden, Wyo.....	7,846.66	2,630.65		10,477.31	Hayden.....	10,450.00	1,404.00	11,854.00	Hayden.....	15,000	1,850		16,850
Holy Cross, Colo.....	15,375.19	3,474.74	1.20	18,851.13	Holy Cross.....	10,500.00	2,519.00	13,019.00	Holy Cross.....	15,750	2,860		18,610
Kansas, Kans.....	2,467.92	3,437.09		5,905.01	Kansas.....	3,000.00	3,026.00	6,026.00	Kansas.....	4,600	705	3,500	8,805
Las Animas, Colo.....	3,167.08	782.14		3,949.22	Las Animas.....	3,700.00	563.00	4,263.00	Las Animas.....				
Leadville, Colo.....	16,249.70	3,744.16	27.90	20,021.76	Leadville.....	18,100.00	3,848.00	21,948.00	Leadville.....	25,120	4,600		29,720
Medicine Bow, Colo.....	9,945.55	2,708.14		12,653.69	Medicine Bow.....	12,100.00	1,592.00	13,692.00	Medicine Bow.....	17,120	2,734		19,854
Montezuma, Colo.....	11,529.73	3,541.16		15,070.89	Montezuma.....	15,745.00	2,562.00	18,307.00	Montezuma.....	20,210	3,230		23,440
Nebraska, Nebr.....	6,645.28	5,412.01		12,057.29	Nebraska.....	6,800.00	6,400.00	13,200.00	Nebraska.....	9,750	1,500	7,000	18,250
Pike, Colo.....	20,979.53	9,608.73	50.25	30,638.51	Pike.....	24,750.00	6,353.00	31,103.00	Pike.....	32,080	3,900	5,300	41,280
Rio Grande, Colo.....	15,716.10	2,345.54		18,061.64	Rio Grande.....	18,250.00	1,694.00	19,944.00	Rio Grande.....	24,070	2,550		26,620
Routt, Colo.....	8,639.69	3,791.82		12,431.51	Routt.....	13,800.00	2,766.56	16,566.56	Routt.....	19,100	2,950		22,050
San Isabel, Colo.....	7,402.19	3,428.43		10,830.62	San Isabel.....	8,000.00	930.00	8,930.00	San Isabel.....	16,350	1,720		18,070
San Juan, Colo.....	11,959.57	4,082.75	6.00	16,048.32	San Juan.....	18,200.00	3,114.00	21,314.00	San Juan.....	28,100	3,358		31,458
Shoshone, Wyo.....	12,155.82	3,139.72	55.20	15,350.74	Shoshone.....	14,400.00	1,827.00	16,227.00	Shoshone.....	22,250	2,970		25,220
Sopris, Colo.....	1,374.32	805.08		2,179.40	Sopris.....	11,125.00	1,475.00	12,600.00	Sopris.....	19,010	3,048		22,058
Sundance, Wyo.....	3,310.41	1,967.06	870.03	6,147.50	Sundance.....	3,700.00	623.00	4,323.00	Sundance.....	5,050	979		6,029
Uncompahgre, Colo.....	12,865.31	4,016.73	53.05	16,935.09	Uncompahgre.....	14,200.00	2,734.00	16,934.00	Uncompahgre.....	22,240	3,750		25,990
White River, Colo.....	10,900.01	2,903.59		13,803.60	White River.....	15,100.00	2,189.00	17,289.00	White River.....	17,640	2,350		19,990
Total.....	280,033.16	95,388.99	2,676.02	378,098.17	Total.....	352,286.39	74,203.81	426,490.20	Total.....	488,020	70,180	19,800	578,000
					Fire (not distributed above).....			5,000.00					
					Total.....			431,490.20					

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 2—Continued.	DISTRICT 2—Continued.	DISTRICT 2—Continued.
OPERATION—continued.	OPERATION—continued.	OPERATION—continued.
Accounts:	Accounts:	Accounts:
Salaries..... \$4,320.83	Salaries..... \$7,087.50	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Traveling expenses..... 649.95	Traveling expenses..... 450.00	Occupancy:
\$4,970.78	\$7,537.50	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Occupancy:	Occupancy:	Maintenance and miscellaneous:
(The expenses under Occupancy have been distributed and charged against the individual Forests on account of which the work was performed.)	Uses—Salaries..... 900.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Maintenance and miscellaneous:	Boundaries—Expenses..... 1,400.00	
Salaries..... \$6,833.61	Settlement—Salaries..... 1,800.00	
Rent..... 4,719.86	4,100.00	
Telephone..... 500.00	Maintenance and miscellaneous:	
Supplies..... 1,723.00	Salaries..... \$9,380.00	
Advertising..... 571.91	Expenses..... 300.00	
14,348.38	Rent..... 5,580.00	
	Telephone..... 1,291.20	
	Supplies..... 500.00	
	Advertising..... 1,800.00	
	18,851.20	
SILVICULTURE.	SILVICULTURE.	SILVICULTURE.
Supervision:	Supervision:	Supervision:
Salaries..... \$2,741.67	Salaries..... \$4,700.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field expenses..... 450.00	Travel and field ex- penses..... 1,500.00	Timber sales:
3,191.67	6,200.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Timber sales:	Timber sales:	
Salaries and traveling expenses..... 1,301.73	Salaries..... 900.00	
(\$6,397.80 of the expenses of Timber sales has been distributed and charged against the individual Forests on account of which the work was performed. The amount shown here represents general work not properly chargeable against any particular Forests.)		
Planting:	Planting:	Planting:
Salaries..... \$1,691.68	Salaries..... \$2,900.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field expenses..... 948.25	Travel and field ex- penses and station ex- penses..... 5,450.00	
2,639.93	8,350.00	
Federal cooperation:	Federal cooperation:	Federal cooperation:
Salaries..... 1,224.50	(Expenses to be borne by other federal bureaus.)	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field expenses..... 896.70		Silvics (Forest studies and recon- noissance):
2,121.20		Salaries..... \$5,860.00
Silvics:	Silvics:	Travel and field ex- penses..... 2,600.00
Salaries..... 725.00	Salaries..... \$2,755.00	\$8,460.00
Travel and field expenses..... 207.44	Travel and field ex- penses..... 1,850.00	
Experiment station expenses..... 500.00	Experiment station ex- penses..... 1,745.00	
1,432.44	6,350.00	
GRAZING.	GRAZING.	GRAZING.
Salaries..... \$3,336.68	Salaries..... \$5,720.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field and station expenses..... 504.70	Travel and field expenses..... 1,500.00	
3,841.38	Extinction of predatory animals..... 1,500.00	
	8,720.00	
PRODUCTS.	PRODUCTS.	PRODUCTS.
Supervision:	Supervision:	Supervision:
Salaries..... \$3,075.02	Salaries..... \$5,633.34	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field expenses..... 1,532.22	Travel and field ex- penses..... 2,227.65	
4,607.24	7,860.99	
Laboratory, Boulder:	Laboratory, Boulder:	Laboratory, Boulder:
Salaries..... 2,924.99	Salaries..... 4,748.89	Salaries..... \$3,900.00
Field and station expenses..... 1,111.69	Travel, field, and sta- tion expenses..... 1,050.00	Travel, field, and sta- tion expenses..... 500.00
4,036.68	5,798.89	4,400.00
Timber treatments (National Forests):	Timber treatments:	Timber treatments:
Salaries..... 3,017.77	(Expenses borne by contributors for cooperative work.)	(See column for 1910.)
Travel and field and station expenses..... 6,621.31		
9,639.08		
Total for District 2..... 440,362.04	Total for District 2..... 538,411.00	Total for District 2..... 590,860.00
DISTRICT 3.	DISTRICT 3.	DISTRICT 3.
(Headquarters, Albuquerque, N. Mex.)		
This district includes Arizona, Arkansas, Florida, New Mexico, and Oklahoma.		
OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.
Supervision:	General contingent..... \$12,533.44	Supervision:
Salaries..... \$3,301.68	Supervision:	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
Travel and field expenses..... 881.41	Salaries..... \$5,660.00	
\$4,183.09	Travel and field ex- penses..... 1,600.00	
Law:	7,260.00	
Salaries..... 1,622.50	Law:	Law:
Travel and field expenses..... 549.83	Salaries..... 5,762.00	(See note under "General admin- istration," Forester and Asso- ciate Forester.)
2,172.33	Travel and field ex- penses..... 1,500.00	
	7,262.00	

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>					<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>				<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 3—Continued.					DISTRICT 3—Continued.				DISTRICT 3—Continued.				
OPERATION.					OPERATION.				OPERATION.				
Supervision:					Supervision:				Supervision:				
Salaries.....	\$1,983.34				Salaries.....	\$3,500.00			(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Travel and field expenses.....	482.85			\$2,466.19	Travel and field ex- penses.....	1,200.00		\$4,700.00					
Organization:					Organization:				Organization:				
Salaries.....	641.67				Salaries.....	924.99			(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Travel and field expenses.....	856.15			1,497.82	Travel and field ex- penses.....	1,400.00		2,324.99					
Accounts:					Ranger schools.....			4,000.00	Accounts:				
Salaries.....	3,947.23				Accounts:				(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Travel and field expenses.....	173.15			4,120.38	Salaries.....	6,893.67							
Occupancy:					Travel and field ex- penses.....	505.78		7,399.45	Occupancy:				
(The expenses of Occupancy have been distributed and charged against the individual Forests on account of which the work was performed.)					Occupancy:				(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Maintenance and miscellaneous:					Boundaries.....	4,300.00			Maintenance and miscellaneous:				
Salaries.....	\$6,397.01				Settlement.....	5,671.50		9,971.50	(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Rent.....	3,163.83				Maintenance and miscellaneous:				Salaries.....				
Telephone.....	173.00				Salaries.....	\$6,760.50			(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Supplies.....	1,027.63				Rent.....	5,025.32			Travel and field ex- penses.....				
Advertising.....	223.15			10,984.62	Telephone.....	225.00							
					Supplies.....	500.00		13,510.82					
					Advertising.....	1,000.00							
SILVICULTURE.					SILVICULTURE.				SILVICULTURE.				
Supervision:					Supervision:				Supervision:				
Salaries.....	2,527.34				Salaries.....	5,245.00			(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Travel and field expenses.....	668.11			3,195.45	Travel and field ex- penses.....	3,500.00		8,745.00					
Planting:					Planting:				Planting:				
(The expenses of Planting Sales have been distributed and charged against the individual Forests on account of which the work was performed.)					Salaries.....	1,900.00			(See note under "General admin- istration," Forester and Asso- ciate Forester.)				
Silvics:					Travel and field and sta- tion expenses.....	3,250.00		5,150.00	Silvics—Reconnaissance Studies, etc.:				
Salaries.....	1,786.67				Silvics—Reconnaissance:				Salaries.....	\$7,300.00			
Travel and field expenses.....	848.38			3,632.77	Salaries.....	1,120.00			Travel and field ex- penses.....	3,200.00			\$10,500.00
Experiment Station expenses.....	997.72				Travel and field ex- penses.....	2,362.02		3,482.02					
					Silvics—Experiment station on Co- conino Forest:				Silvics—Experiment station:				
					Salaries.....	3,010.67			Salaries.....	8,000.00			
					Station expenses.....	2,129.33		5,140.00	Station, travel, etc., expenses.....	5,419.00			13,419.00
Forests.					Forests.				Forests.				
Salary.	Ex- penses.	Fire.	Total.		Salary.	Ex- penses.	Total.		Salary.	Ex- penses.	Plant- ing.	Total.	
Alamo, N. Mex.....	\$13,157.78	\$2,646.75	\$130.68	\$15,935.21	Alamo.....	\$17,150.00	\$2,793.00	\$19,943.00	Alamo.....	\$29,660	\$3,789	\$33,449	
Apache, Ariz.....	9,966.38	2,665.04	108.22	12,739.64	Apache.....	18,750.00	3,258.00	22,008.00	Apache.....	28,460	2,954	31,414	
Arkansas, Ark.....	10,144.54	11,362.34	245.48	21,752.36	Arkansas.....	15,715.00	6,364.00	22,079.00	Arkansas.....	26,020	6,940	32,960	
Carson, N. Mex.....	6,965.83	3,839.90	81.64	10,887.37	Carson.....	14,766.39	3,310.00	18,076.39	Carson.....	24,960	4,011	28,971	
Chiricahua, Ariz.....	8,135.56	3,259.97	46.50	11,442.03	Chiricahua.....	9,301.67	2,305.35	11,607.02	Chiricahua.....	18,360	2,771	21,131	
Choctawhatchee, Fla.....		854.81		854.81	Choctawhatchee.....				Choctawhatchee.....	7,600	1,409	9,009	
Coconino, Ariz.....	30,577.77	10,609.82	847.27	42,034.86	Coconino.....	41,675.00	7,438.98	49,113.98	Coconino.....	32,320	4,487	36,807	
Coronado, Ariz.....	8,026.95	2,405.31		10,432.26	Coronado.....	12,200.00	1,976.00	14,176.00	Coronado.....	21,410	2,802	24,212	
Crook, Ariz.....	8,805.00	3,221.88	15.90	12,042.78	Crook.....	13,500.00	2,409.16	15,909.16	Crook.....	24,170	3,542	27,712	
Datil, N. Mex.....	17,274.15	3,537.95	566.88	21,378.98	Datil.....	24,533.05	3,606.18	28,139.23	Datil.....	38,220	4,683	42,903	
Garces, Ariz.....	8,768.58	3,192.85	32.05	11,993.48	Garces.....	10,400.00	1,619.00	12,019.00	Garces.....	16,600	2,745	19,345	
Gila, N. Mex.....	18,968.33	8,784.54	2,039.70	29,792.57	Gila.....	23,870.00	6,922.55	30,792.55	Gila.....	39,590	4,694	44,284	
Jemez, N. Mex.....	14,676.09	3,427.91	182.45	18,286.45	Jemez.....	15,350.00	2,490.00	17,840.00	Jemez.....	27,860	3,616	31,476	
Lincoln, N. Mex.....	8,174.69	4,947.32	157.49	13,279.50	Lincoln.....	11,125.00	1,147.00	12,272.00	Lincoln.....	17,800	2,418	20,218	
Luquillo, P. R.....		82.29		82.29	Luquillo.....				Luquillo.....				
Manzano, N. Mex.....	7,468.72	4,116.05	17.60	11,602.37	Manzano.....	7,540.00	1,405.00	8,945.00	Manzano.....	12,260	2,516	14,776	
Ocala, Fla.....		202.60		202.60	Ocala.....	3,320.00	841.00	4,161.00	Ocala.....	5,000	623	5,623	
Ozark, Ark.....	9,393.16	4,634.72	195.15	14,223.03	Ozark.....	12,540.00	2,600.00	15,140.00	Ozark.....	23,320	3,641	26,961	
Pecos, N. Mex.....	5,986.94	5,337.28	58.45	11,402.67	Pecos.....	12,400.00	6,275.00	18,675.00	Pecos.....	23,120	3,369	26,489	
Prescott, Ariz.....	14,241.39	8,259.40	287.75	22,788.54	Prescott.....	18,810.00	4,190.00	23,000.00	Prescott.....	29,670	4,181	33,851	
Sitgreaves, Ariz.....	8,630.97	4,035.51	60.15	12,726.63	Sitgreaves.....	12,277.50	2,753.00	15,030.50	Sitgreaves.....	24,450	3,624	28,074	
Tonto, Ariz.....	14,007.47	2,913.19		16,920.66	Tonto.....	18,550.00	3,081.00	21,631.00	Tonto.....	29,420	3,691	33,111	
Tusayan, Ariz.....					Tusayan.....				Tusayan.....	23,400	3,814	27,214	
Wichita, Okla.....	4,199.27	1,171.44	37.67	5,408.38	Wichita.....	4,920.00	650.00	5,570.00	Wichita.....	9,100	1,550	10,650	
Zuni, N. Mex.....	257.50	803.16	8.75	1,069.41	Zuni.....	11,259.45	1,760.00	13,019.45	Zuni.....	17,060	2,681	19,741	
Total.....	227,827.07	96,332.03	5,119.78	329,278.88	Total.....	329,953.06	69,194.22	399,147.28	Total.....	549,830	80,551	636,581	
					Fire.....			4,000.00					
					Total.....			403,147.28					

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
Salary and general expenses, Forest Service, \$3,296,200—Continued.					Salary and general expenses, Forest Service, \$4,046,200—Continued.				Salary and general expenses, Forest Service, \$4,768,700—Continued.				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 3—Continued.					DISTRICT 3—Continued.				DISTRICT 3—Continued.				
SILVICULTURE—continued.					SILVICULTURE—continued.				SILVICULTURE—continued.				
Grazing:					Grazing:								
Salaries.....				\$3,243.34	Salaries.....			\$4,773.50					
Travel and field expenses.....				814.30	Travel and field ex-			penses.....					
Extermination of predatory animals.....				213.45	Extermination of preda-			tory animals.....					
				\$4,271.09				\$7,873.50					
Products:					Products:				Products:				
Salaries.....				1,212.50	(No provision.)				(No provision here.)				
Travel and field expenses.....				222.90									
				1,435.40									
Total for District 3.....				367,238.02	Total for District 3.....			502,500.00	Total for District 3.....				\$673,919.00
DISTRICT 4.					DISTRICT 4.				DISTRICT 4.				
(Headquarters, Ogden, Utah.)													
This district includes Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.													
OFFICE OF THE DISTRICT FORESTER.					OFFICE OF THE DISTRICT FORESTER.				OFFICE OF THE DISTRICT FORESTER.				
Supervision:					Supervision:				Supervision:				
Salaries.....				\$3,075.01	Salaries.....			5,000.00	(See note under "General admin-				
Travel and field expenses.....				627.03	Travel and field ex-			penses.....	istration," Forester and Associ-				
				3,702.04				1,200.00	ate Forester.)				
Law:					Law:				(See note under "General admin-				
Salaries.....				1,293.34	Salaries.....			7,162.50	istration," Forester and Associ-				
Travel and field expenses.....				406.93	Travel and field ex-			penses.....	ate Forester.)				
				1,700.27				1,600.00					
OPERATION.					OPERATION.				OPERATION.				
Supervision:					Supervision:				Supervision:				
Salaries.....				\$2,550.00	Salaries.....			\$4,500	(See note under "General admin-				
Travel and field expenses.....				463.00	Travel and field ex-			penses.....	istration," Forester and Associ-				
				3,013.00				1,200	ate Forester.)				
Organization:								5,700.00					
Salaries.....				85.00									
Travel and field expenses.....				1,238.25									
				1,323.25									
Forests.	Salary.	Expenses.	Fire.	Total.	Forests.	Salary.	Expenses.	Total.	Forests.	Salary.	Ex-	Plant-	Total.
											penses.	ing.	
Ashley.....	\$6,695.72	\$1,253.43		\$7,949.15	Ashley.....	\$9,220.00	\$1,850.00	\$11,070.00	Ashley.....	\$17,900	\$1,768		\$19,668
Boise.....	14,494.16	5,718.53	\$24.00	20,236.69	Boise.....	16,075.00	3,008.40	19,083.40	Boise.....	24,500	1,925	\$1,500	27,925
Cache.....	10,201.36	2,611.84		12,813.20	Cache.....	10,361.11	1,634.00	11,995.11	Cache.....	15,700	1,800	1,200	18,700
Caribou.....	6,831.37	2,358.31		9,189.68	Caribou.....	9,580.00	1,406.00	10,986.00	Caribou.....	17,450	1,750	1,000	20,200
Challis.....	6,125.27	1,299.33	24.00	7,448.60	Challis.....	11,850.00	1,850.00	13,700.00	Challis.....	19,800	1,800		21,600
Dixie.....	6,323.62	2,359.98		8,683.60	Dixie.....	8,400.00	1,961.00	10,361.00	Dixie.....	14,900	1,700		16,600
Fillmore.....	8,667.24	1,482.49		10,149.73	Fillmore.....	11,820.00	2,130.00	13,950.00	Fillmore.....	16,200	1,530	1,000	18,730
Fishlake.....	7,443.05	1,066.11		8,509.16	Fishlake.....	11,053.06	1,551.00	12,604.06	Fishlake.....	15,900	1,900	3,000	20,800
Humboldt.....	5,940.44	3,249.43		9,189.87	Humboldt.....	11,120.00	2,435.50	13,555.50	Humboldt.....	17,100	1,926		19,026
Idaho.....	7,474.61	1,476.02	1,177.02	10,127.65	Idaho.....	11,200.00	1,484.33	12,734.33	Idaho.....	20,000	1,780		21,780
Kaibab.....	7,298.90	2,186.57	4.50	9,589.97	Kaibab.....	9,300.00	1,172.00	10,472.00	Kaibab.....	18,700	1,700		20,400
La Sal.....	4,376.22	1,363.56		5,739.78	La Sal.....	5,900.00	750.00	6,650.00	La Sal.....	12,600	1,290		13,890
Lemhi.....	9,366.38	2,123.58		11,489.96	Lemhi.....	12,275.00	1,840.00	14,115.00	Lemhi.....	17,700	2,900	150	20,750
Manti.....	11,046.00	2,813.38	2.85	13,862.23	Manti.....	15,731.94	3,500.00	19,231.94	Manti.....	19,400	2,100	1,500	23,000
Minidoka.....	7,857.49	1,649.29		9,506.78	Minidoka.....	11,350.00	1,300.00	12,650.00	Minidoka.....	15,500	1,100	1,200	17,800
Moapa.....	1,400.00	1,147.96		2,547.96	Moapa.....	1,400.00	700.00	2,100.00	Moapa.....	2,500	900		3,400
Nebo.....	5,045.54	1,034.97		6,080.51	Nebo.....	5,076.33	584.00	5,660.33	Nebo.....	8,100	700	500	9,300
Nevada.....	1,579.99	2,391.32		3,971.31	Nevada.....	12,800.00	2,046.55	14,846.55	Nevada.....	18,500	2,400		20,900
Payette.....	8,755.18	2,760.08	804.66	12,319.92	Payette.....	13,683.33	3,070.00	16,753.33	Payette.....	18,600	1,800	260	20,660
Pocatello.....	6,974.16	4,221.90		11,196.06	Pocatello.....	10,400.00	3,700.35	14,100.35	Pocatello.....	12,100	1,200	6,946	20,246
Powell.....	7,653.00	960.43		8,613.43	Powell.....	9,840.00	490.00	10,330.00	Powell.....	15,300	1,200		16,500
Salmon.....	12,804.99	2,959.72	64.40	15,829.11	Salmon.....	18,950.00	3,275.00	22,225.00	Salmon.....	27,000	2,825		29,825
Sawtooth.....	12,202.49	2,786.20		14,988.69	Sawtooth.....	15,233.00	2,400.00	17,633.00	Sawtooth.....	24,600	2,000	600	27,200
Sevier.....	9,609.17	1,082.09		10,691.26	Sevier.....	12,200.00	1,025.00	13,225.00	Sevier.....	18,800	1,500	250	20,550
Targhee.....	15,567.51	4,633.84		20,201.35	Targhee.....	20,750.00	3,403.00	24,153.00	Targhee.....	29,000	2,300	1,100	32,400
Teton.....	8,228.61	1,396.65		9,625.26	Teton.....	12,200.00	2,150.00	14,350.00	Teton.....	20,800	1,300		22,100
Toiyabe.....	10,603.33	4,795.93	15.75	15,415.01	Toiyabe.....	11,200.00	2,270.00	13,470.00	Toiyabe.....	21,000	3,000		24,000
Uinta.....	13,690.22	1,902.79	1.50	15,594.51	Uinta.....	15,100.00	2,072.00	17,172.00	Uinta.....	22,400	2,500	3,700	28,600
Wasatch.....	7,371.77	3,284.42	2.00	10,658.19	Wasatch.....	10,057.45	4,309.00	14,366.45	Wasatch.....	11,500	1,500	10,450	23,450
Weiser.....	11,503.71	2,969.37	197.19	14,670.27	Weiser.....	14,600.00	2,625.00	17,225.00	Weiser.....	19,900	2,300	600	22,800
Wyoming.....	5,793.30	1,400.91		7,194.21	Wyoming.....	11,120.00	1,086.05	12,206.05	Wyoming.....	18,100	1,600		19,700
Total.....	259,024.80	72,740.43	2,317.87	334,083.10	Total.....	359,896.22	53,078.18	422,974.40	Total.....	551,550	55,994	34,956	642,500
					Fire.....			1,000.00					
					Total.....			423,974.40					

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 4—Continued.	DISTRICT 4—Continued.	DISTRICT 4—Continued.
OPERATION—continued.	OPERATION—continued.	OPERATION—continued.
Drafting:	Drafting:	Drafting:
Salaries..... \$231.95	Salaries..... \$5,337.49	(See note under "General administration," Forester and Associate Forester.)
Accounts:	Accounts:	Accounts:
Salaries..... \$4,293.34	Salaries..... \$7,360.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 133.35	Travel and field expenses..... 500.00	
4,426.69	7,860.00	
Maintenance and Miscellaneous:	Maintenance and Miscellaneous:	Maintenance and Miscellaneous:
Salaries..... 6,196.34	Salaries..... 11,237.50	(See note under "General administration," Forester and Associate Forester.)
Rent..... 2,213.33	Rent..... 4,120.00	
Telephone..... 545.96	Telephone..... 600.00	
Supplies..... 1,029.26	Supplies..... 1,300.00	
Advertising..... 535.27	Advertising..... 1,500.00	
10,520.16	18,757.50	
SILVICULTURE.	SILVICULTURE.	SILVICULTURE.
Supervision:	Supervision:	Supervision:
Salaries..... \$2,401.69	Salaries..... \$4,120.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 593.55	Travel and field expenses..... 1,200.00	
2,995.24	5,320.00	
Planting:	Planting:	Planting:
	Salaries..... 1,800.00	(See note under "General administration," Forester and Associate Forester.)
	Travel and field expenses..... 800.00	
	2,600.00	
Silvics:	Silvics:	Silvics—Reconnaissance and Studies:
Salaries..... 1,083.33	(No provision.)	Salaries..... \$6,060.00
Travel and field expenses..... 242.80		Travel and field expenses..... 2,600.00
1,326.13		\$8,660.00
PRODUCTS.	PRODUCTS.	PRODUCTS.
Salaries..... \$870.83	(No provision.)	(No provision.)
Travel and field expenses..... 104.50		
975.33		
GRAZING.	GRAZING.	GRAZING.
Salaries..... \$3,791.68	Salaries..... \$7,700.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 739.80	Travel and field expenses..... 1,750.00	
4,531.48	9,450.00	
SUPPLY DEPOT.	SUPPLY DEPOT.	SUPPLY DEPOT.
Salaries..... \$12,255.50	Salaries..... \$13,740.00	(See note under "General administration," Forester and Associate Forester.)
Travel, field, and station expenses..... 2,737.24	Registration expenses..... 1,000.00	
Rent..... 3,000.00	Miscellaneous expenses..... 1,128.00	
	Freight and expenses..... 2,000.00	
	Printing, etc..... 2,800.00	
	Rent..... 1,000.00	
17,992.74	21,668.00	
PROPERTY AUDITOR.	PROPERTY AUDITOR.	PROPERTY AUDITOR.
Salaries..... \$4,739.98	Salaries..... \$4,700.00	(See note under "General administration," Forester and Associate Forester.)
Expenses..... 54.45	Expenses..... 200.00	
4,794.43	4,900.00	
Total for District 4..... 391,615.81	Total for District 4..... 540,821.00	Total for District 4..... 651,160.00
DISTRICT 5.	DISTRICT 5.	DISTRICT 5.
(Headquarters, San Francisco, Cal.)		
This district includes California and southwestern Nevada.		
OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.	OFFICE OF DISTRICT FORESTER.
	General contingent..... \$21,332.92	(See note under "General administration," Forester and Associate Forester.)
Supervision:	Supervision:	Supervision:
Salaries..... \$3,673.33	Salaries..... 6,730.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 695.14	Travel and field expenses..... 1,500.00	
4,368.47	8,230.00	
Law:	Law:	Law:
Salaries..... 1,890.34	Salaries..... 6,000.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 522.62	Travel and field expenses..... 1,861.00	
2,412.96	7,861.00	
OPERATION.	OPERATION.	OPERATION.
Supervision:	Supervision:	Supervision:
Salaries..... \$1,925.01	Salaries..... \$3,200.00	(See note under "General administration," Forester and Associate Forester.)
Travel and field expenses..... 586.94	Travel and field expenses..... 1,300.00	
2,511.95	4,500.00	

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
Salary and general expenses, Forest Service, \$3,296,200—Continued.					Salary and general expenses, Forest Service, \$4,046,200—Continued.				Salary and general expenses, Forest Service, \$4,768,700—Continued.				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 5—Continued.					DISTRICT 5—Continued.				DISTRICT 5—Continued.				
OPERATION—continued.					OPERATION—continued.				OPERATION—continued.				
Organization:					Organization:				Organization:				
Salaries.....\$525.00					Salaries.....\$900.00				(See note under "General admin-				
Travel and field expenses.....1,045.09					Travel and field ex-3,400.00				istration," Forester and Associ-				
\$1,570.09					\$4,300.00				ate Forester.)				
CALIFORNIA.													
Forests.	Salary.	Expenses.	Fire.	Total.	Forests.	Salary.	Ex-penses.	Total.	Forests.	Salary.	Ex-penses.	Plant-ing.	Total.
Angeles.....	\$34,718.00	\$10,353.17	\$2,312.42	\$47,383.59	Angeles.....	\$39,630.00	\$6,859.00	\$46,489.00	Angeles.....	\$39,700	\$3,844	\$7,100	\$50,644
California.....	8,898.61	2,175.99	1,227.04	12,301.64	California.....	16,400.00	1,835.00	18,235.00	California.....	24,100	1,940	200	26,240
Cleveland.....	23,421.93	6,939.58	1,301.24	31,662.75	Cleveland.....	27,095.00	7,788.00	34,883.00	Cleveland.....	30,200	2,583	6,000	38,783
Del Norte.....					Del Norte.....				Del Norte.....	22,950	1,950	100	25,000
Inyo.....	11,223.60	2,520.73		13,744.33	Inyo.....	16,400.00	2,615.00	19,015.00	Inyo.....	27,100	2,200	200	29,500
Kern.....					Kern.....				Kern.....	25,200	1,812	500	27,512
Klamath.....	18,349.14	3,079.29	1,616.29	23,044.72	Klamath.....	23,300.00	3,106.00	26,406.00	Klamath.....	23,700	2,900	400	27,000
Lassen.....	9,721.39	4,583.75	114.60	14,419.74	Lassen.....	17,350.00	2,656.00	20,006.00	Lassen.....	28,600	2,254	300	31,154
Modoc.....	9,662.07	2,147.89		11,809.96	Modoc.....	16,900.00	2,360.00	19,260.00	Modoc.....	28,800	1,990	100	30,890
Mono.....	4,488.33	1,561.92	53.97	6,104.22	Mono.....	13,250.00	1,800.00	15,050.00	Mono.....	21,900	1,675	150	23,725
Monterey.....	7,072.97	1,618.01	306.71	8,997.69	Monterey.....	8,505.00	1,000.00	9,505.00	Monterey.....	13,800	670	600	15,070
Plumas.....	18,560.95	5,283.07	366.58	24,210.60	Plumas.....	24,325.00	4,000.00	28,325.00	Plumas.....	38,000	3,312	700	42,012
San Luis.....	6,635.00	2,009.94	8.00	8,652.94	San Luis.....				San Luis.....				
Santa Barbara.....	31,199.99	4,824.00	416.60	36,440.59	Santa Barbara.....	33,801.00	4,186.00	37,987.00	Santa Barbara.....	32,450	1,939	3,500	37,889
Sequoia.....	23,484.64	4,991.89	285.85	28,762.38	Sequoia.....	37,100.00	3,350.00	40,450.00	Sequoia.....	27,800	3,162	550	31,512
Shasta.....	13,423.89	8,543.57	1,105.95	23,073.41	Shasta.....	22,575.00	2,250.00	24,825.00	Shasta.....	34,400	3,275	1,000	38,675
Sierra.....	28,527.25	6,063.04	547.90	35,138.19	Sierra.....	29,880.00	2,750.00	32,630.00	Sierra.....	45,600	2,570	1,200	49,370
Stanislaus.....	14,624.31	2,772.66	1,205.67	18,602.64	Stanislaus.....	22,620.00	3,419.00	26,039.00	Stanislaus.....	31,700	3,588	500	35,788
Tahoe.....	17,427.66	4,435.35	117.30	21,980.31	Tahoe.....	26,112.50	4,282.40	30,394.90	Tahoe.....	38,050	3,586	600	42,236
Trinity.....	14,628.18	3,388.30	124.80	18,141.28	Trinity.....	21,150.00	1,907.15	23,057.15	Trinity.....	23,950	1,850	200	26,000
Total.....	296,067.91	77,292.15	11,110.92	384,470.98	Total.....	396,393.50	56,163.55	452,557.05	Total.....	558,000	47,100	23,900	629,000
Fire.....					Fire.....10,000.00								
Total.....					Total.....462,557.05								
Drafting: (Not paid from this appropriation.)					Drafting: Salaries.....\$4,500.00				Drafting: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
Accounts: Salaries.....\$3,960.67					Accounts: Salaries.....\$6,570.00				Accounts: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....126.72					Travel and field ex-415.00				Travel and field ex-415.00				
\$4,087.39					6,985.00								
Occupancy—Settlement: (The expenses of Occupancy have been distributed and charged against the individual Forests on account of which the work was performed.)					Occupancy—Settlement: Salaries.....1,900.00				Occupancy—Settlement: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
Maintenance and miscellaneous: Salaries.....\$6,542.84					Maintenance and miscellaneous: Salaries.....\$8,863.33				Maintenance and miscellaneous: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
Rent.....4,641.00					Rent.....7,458.36				Rent.....7,458.36				
Telephone.....450.00					Telephone.....1,000.00				Telephone.....1,000.00				
Supplies.....1,690.00					Supplies.....800.00				Supplies.....800.00				
Advertising.....190.00					Advertising.....400.00				Advertising.....400.00				
13,513.84					18,521.69								
SILVICULTURE.					SILVICULTURE.				SILVICULTURE.				
Supervision: Salaries.....\$2,605.57					Supervision: Salaries.....\$4,500.00				Supervision: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....775.29					Travel and field ex-1,250.00				Travel and field ex-1,250.00				
3,380.86					5,750.00								
Planting—Cooperative planting: Salaries and expenses.....100.00					Planting: Salaries.....1,800.00				Planting: (See note under "General admin- istration," Forester and Associ- ate Forester.)				
					Travel and field ex-750.00				Travel and field ex-750.00				
					Experimental work, Hawaii.....2,000.00				Experimental work, Hawaii.....2,000.00				
					4,550.00								
Silvics: Salaries.....688.90					Silvics: (No provision.)				Silvics—Studies and Reconnaiss- ance: Salaries.....\$6,520.00				
Travel, field, and station expenses.....50.35									Travel, field, and sta- tion expenses.....2,600.00				
739.25									\$9,120.00				
GRAZING.					GRAZING.				GRAZING.				
Salaries.....\$3,500.01					Salaries.....\$5,016.67				(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....720.00					Travel and field expenses.....1,250.00				Travel and field ex-1,250.00				
\$4,220.01					\$6,266.67								

130 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.					Appropriations for the current fiscal year ending June 30, 1910.				Estimated expenditures for the fiscal year ending June 30, 1911.				
<i>Salary and general expenses, Forest Service, \$3,296,200—Continued.</i>					<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>				<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>				
DISTRICT OFFICES—Continued.					DISTRICT OFFICES—Continued.				DISTRICT OFFICES—Continued.				
DISTRICT 5—Continued.					DISTRICT 5—Continued.				DISTRICT 5—Continued.				
PRODUCTS.					PRODUCTS.				PRODUCTS.				
Supervision:					Supervision:				Supervision:				
Salaries.....	\$2,977.79				Salaries.....	\$3,750.00			(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....	600.31				Travel and field ex- penses.....	1,325.00		\$5,075.00	Laboratory, Berkeley:				
				\$3,578.10					Salaries.....	\$3,560.00			
Laboratory, Berkeley:					Laboratory, Berkeley:				Travel, field, and sta- tion expenses.....	400.00			
Salaries.....	2,949.99				Salaries.....	3,111.12						\$3,960.00	
Travel, field, and station expenses.....	1,255.78			4,205.77	Travel, field, and sta- tion expenses.....	1,138.88		4,250.00					
									Total District 5.....			642,080.00	
Total District 5.....				429,059.67	Total District 5.....			567,579.33					
DISTRICT 6.					DISTRICT 6.				DISTRICT 6.				
(Headquarters, Portland, Oreg.)													
This district includes Washington, Oregon, and Alaska.													
OFFICE OF THE DISTRICT FORESTER.					OFFICE OF THE DISTRICT FORESTER.				OFFICE OF THE DISTRICT FORESTER.				
Supervision:					General contingent.....	\$24,218.92			Supervision:				
Salaries.....	\$3,266.67				Supervision:				(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....	576.31			\$3,842.98	Salaries.....	\$6,212.00			Laboratory, Berkeley:				
					Travel and field ex- penses.....	1,900.00		8,112.00	Salaries.....				
Law:					Law:				(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Salaries.....	1,750.00				Salaries.....	4,800.00							
Travel and field expenses.....	529.90			2,279.90	Travel and field ex- penses.....	1,235.20		6,035.20					
OPERATION.					OPERATION.				OPERATION.				
Supervision:					Supervision:				Supervision:				
Salaries.....	\$1,925.01				Salaries.....	\$7,500.00			(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....	315.37			2,240.38	Travel and field ex- penses.....	1,075.00		8,575.00					
									Organization:				
Organization:					Organization:				(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Salaries.....	525.00				Salaries.....	900.00							
Travel and field expenses.....	883.01			1,408.01	Travel and field ex- penses.....	2,000.00		2,900.00					
					New forest assistants: Expenses.....	915.97							
Forests.	Salaries.	Ex- penses.	Fire.	Total.	Forests.	Salaries.	Ex- penses.	Total.	Forests.	Salaries.	Ex- penses.	Plant- ing.	Total.
Cascade, Oreg.....	\$11,314.99	\$2,096.38	\$646.53	\$14,057.90	Cascade.....	\$17,400.00	\$1,775.00	\$19,175.00	Cascade.....	\$34,200	\$3,050		\$37,250
Chelan, Wash.....	11,702.46	3,392.28	851.79	16,006.53	Chelan.....	24,970.00	3,098.35	28,068.35	Chelan.....	38,500	3,695		42,195
Chugach, Alaska.....	4,889.01	3,850.61		8,739.62	Chugach.....	8,508.00	3,154.80	11,662.80	Chugach.....	11,600	6,248		17,848
Columbia, Wash.....	6,131.10	4,477.44		10,608.54	Columbia.....	11,133.33	2,681.00	13,814.33	Columbia.....	20,100	3,276		23,376
Colville, Wash.....	8,285.00	3,245.82	156.71	11,787.53	Colville.....	14,350.00	2,450.00	16,800.00	Colville.....	19,500	3,410		22,910
Crater, Oreg.....	11,614.86	4,166.10	2,672.71	18,453.67	Crater.....	19,150.00	3,106.00	22,256.00	Crater.....	28,150	3,219		31,369
Deschutes, Oreg.....	10,862.62	2,243.03	7,712.59	20,818.24	Deschutes.....	17,550.00	1,438.00	18,988.00	Deschutes.....	27,450	3,013		30,463
Fremont, Oreg.....	12,644.94	2,582.48	331.59	15,559.01	Fremont.....	17,600.00	1,449.80	19,049.80	Fremont.....	26,750	3,150		29,900
Malheur, Oreg.....	8,135.01	1,496.62	32.25	9,663.88	Malheur.....	12,800.00	1,213.00	14,013.00	Malheur.....	21,450	2,613		24,063
Olympic, Wash.....	9,422.58	3,279.12	98.50	12,800.20	Olympic.....	16,800.00	2,235.00	19,035.00	Olympic.....	29,600	3,325		32,925
Oregon, Oreg.....	18,650.01	4,146.62	3,303.76	26,100.39	Oregon.....	24,708.33	2,752.01	27,460.34	Oregon.....	36,600	4,282		40,882
Rainier, Wash.....	11,602.19	3,342.64	136.25	15,081.08	Rainier.....	17,290.00	2,730.00	20,020.00	Rainier.....	32,500	3,720		36,220
Siskiyou, Oreg.....	11,700.00	3,853.92	1,202.63	16,756.55	Siskiyou.....	14,625.00	1,886.00	16,511.00	Siskiyou.....	26,025	3,536		29,561
Siuslaw, Oreg.....	6,091.59	3,801.77		9,893.36	Siuslaw.....	11,950.00	2,835.00	14,785.00	Siuslaw.....	19,900	3,275		23,175
Snoqualmie, Wash.....	10,374.99	4,175.77	9.75	14,560.51	Snoqualmie.....	15,700.00	4,012.00	19,712.00	Snoqualmie.....	26,400	3,729		30,129
Tongass, Alaska.....	3,259.34	3,025.37		6,284.71	Tongass.....	5,672.00	2,123.20	7,795.20	Tongass.....	7,500	800		8,300
Umatilla, Oreg.....	6,802.14	1,891.62	19.30	8,773.06	Umatilla.....	10,900.00	950.00	11,850.00	Umatilla.....	14,450	2,750		17,200
Umpqua, Oreg.....	12,053.33	3,740.06	198.30	15,991.69	Umpqua.....	19,300.00	2,200.00	21,500.00	Umpqua.....	32,500	3,610		36,110
Wallowa, Oreg.....	13,939.59	3,118.13	23.62	17,081.34	Wallowa.....	16,250.00	3,321.00	19,571.00	Wallowa.....	29,500	3,800		33,300
Washington, Wash.....	10,029.13	3,946.95	130.50	14,106.58	Washington.....	18,716.67	3,151.36	21,868.03	Washington.....	28,200	3,725		31,925
Wenaha, Oreg.....	7,775.56	1,211.01	318.74	9,305.31	Wenaha.....	12,575.00	1,364.25	13,939.25	Wenaha.....	17,450	2,340		19,790
Wenatchee, Wash.....	14,046.66	2,741.84	738.01	17,526.51	Wenatchee.....	18,850.00	3,079.00	21,929.00	Wenatchee.....	28,150	3,979		32,129
Whitman, Oreg.....	10,603.61	2,316.58	64.00	12,984.19	Whitman.....	17,313.34	2,615.55	19,928.89	Whitman.....	23,750	3,200		26,950
Total.....	232,040.71	72,242.16	18,647.53	322,930.40	Total.....	364,111.67	54,620.32	418,731.99	Total.....	580,225	77,775		658,000
					Fire (not distributed above).....			9,000.00					
					Total.....			427,731.99					
Accounts:					Accounts:				Accounts:				
Salaries.....	\$4,051.12				Salaries.....	\$6,140.00			(See note under "General admin- istration," Forester and Associ- ate Forester.)				
Travel and field expenses.....	135.00			\$4,186.12	Travel and field ex- penses.....	300.00		\$6,440.00					

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salary and general expenses, Forest Service, \$3,296,900—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,046,200—Continued.</i>	<i>Salary and general expenses, Forest Service, \$4,768,700—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 6—Continued.	DISTRICT 6—Continued.	DISTRICT 6—Continued.
OPERATION—continued.	OPERATION—continued.	OPERATION—continued.
Occupancy: (Expenses of Occupancy distributed and charged against the individual Forests on account of which the work was performed.)	Occupancy: Boundaries expenses..... \$1,000.00	Occupancy: (See note under "General administration." Forester and Associate Forester.)
Maintenance and Miscellaneous:	Maintenance and Miscellaneous:	Maintenance and Miscellaneous: (See note under "General administration." Forester and Associate Forester.)
Salaries..... \$6,130.34	Salaries..... \$8,260.00	
Rent..... 4,317.75	Rent..... 7,051.92	
Telephone..... 275.63	Telephone..... 691.00	
Supplies..... 422.15	Supplies..... 1,090.00	
Advertising..... 269.10	Advertising..... 560.00	
	Miscellaneous expenses..... 200.00	
	17,852.92	
SILVICULTURE.	SILVICULTURE.	SILVICULTURE.
Supervision:	Supervision:	Supervision: (See note under "General administration." Forester and Associate Forester.)
Salaries..... \$2,566.68	Salaries..... \$4,700.00	
Travel and field expenses..... 345.49	Travel and field expenses..... 1,000.00	
	5,700.00	
Federal Cooperation:	Timber sales:	Timber Sales: (See note under "General administration." Forester and Associate Forester.)
Salaries and expenses..... 271.96	Salaries and expenses..... 2,000.00	
Planting:	Planting:	Planting: (See note under "General administration." Forester and Associate Forester.)
Salaries and expenses..... 66.60	Salaries..... \$1,200.00	
(\$843.40 of the expenses of planting distributed and charged against the Forests on whose account the work was performed. The amount shown here represents only general experimental planting work not properly chargeable against any particular Forest.)	Travel, field, and station expenses..... 700.00	
Silvics:	Experimental planting and seed collecting.... 4,870.00	
Salaries..... \$672.78		
Travel and field expenses..... 510.00		
	6,770.00	
	Silvics:	Silvics—Studies and Reconnaissance:
	Salaries..... 1,000.00	Salaries..... \$8,800
	Travel, field, and station expenses..... 875.00	Travel, field, and station expenses..... 4,400
	1,875.00	\$13,200
GRAZING.	GRAZING.	GRAZING.
Salaries..... \$3,033.34	Salaries..... \$4,300.00	(See note under "General administration." Forester and Associate Forester.)
Travel and field expenses..... 474.21	Travel and field expenses..... 1,200.00	
	Extinction of predatory animals..... 1,050.00	
	\$6,550.00	
PRODUCTS.	PRODUCTS.	PRODUCTS.
Supervision:	Supervision:	Supervision: (See note under "General administration." Forester and Associate Forester.)
Salaries..... \$3,040.85	Salaries..... \$5,500.00	
Travel and field expenses..... 730.50	Travel and field expenses..... 2,500.00	
	Treating plant expenses..... 1,500.00	
	\$9,500.00	
Laboratory, Seattle:	Laboratory, Seattle:	Laboratory, Seattle:
Salaries..... \$3,383.32	Salaries..... \$3,200.00	Salaries..... \$3,800
Travel, field, and station expenses..... 1,711.67	Travel and field expenses..... 700.00	Travel, field, and station expenses..... 400
	3,900.00	4,200
Total District 6..... 365,110.16	Total District 6..... 540,007.00	Total District 6..... 675,400
Total expenditures, salaries and general expenses..... 3,282,864.22	Total allotted..... 3,936,359.14	Contingent for fire fighting and other unforeseen emergencies in the administration of the National Forests..... 145,000
Balance to be returned to the Treasury..... 13,335.78	Forester's contingent..... 109,840.86	
Total appropriation for salaries and general expenses..... 3,296,200.00	Total appropriation..... 4,046,200.00	Total estimate (increase \$722,500)..... 4,768,700
Improvement of the National Forests, 1909, \$600,000.	Improvement to the National Forests, 1910, \$600,000.	Improvement of the National Forests, 1911, \$275,000.
For the construction and maintenance of roads, trails, bridges, fire anes, telephone lines, cabins, fences, and other permanent improvements necessary for the proper and economical administration, protection and development of the National Forests, \$600,000.	Allotted as follows, approximately:	To be expended as follows:
Expenditures were as follows:	Salaries out of Washington..... \$63,950.00	Salaries out of Washington..... \$35,800.00
Salaries out of Washington..... \$91,744.28	Miscellaneous supplies, etc..... 516,650.00	Miscellaneous supplies, etc..... 230,375.00
Stationery..... 7.55	Freight..... 4,000.00	Freight..... 1,850.00
Miscellaneous supplies and services, etc..... 398,418.82	Express..... 200.00	Express..... 100.00
Furniture..... 2,937.69	Telephone..... 1,000.00	Telephone..... 475.00
Fuel..... 32.98	Apparatus, instruments, and labora-	Apparatus, instruments, and labora-
Freight..... 353.27		
Express..... 23.53		
Telephone..... 504.20		
Rent..... 47.00		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Improvement of the National Forests, 1909, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1910, \$800,000—Continued.</i>	<i>Improvement of the National Forests, 1911, \$275,000—Continued.</i>
Expenditures were as follows—Continued.	Allotted as follows, approximately—Continued.	To be expended as follows—Continued.
Gas and electricity..... \$5.32	tory material..... \$1,000.00	tory material..... \$400.00
Apparatus, instruments, and laboratory material..... 969.97	Travel, station, and field expenses..... 13,200.00	Travel, station, and field expenses..... 6,000.00
Travel, station, and field expenses..... 18,325.70	Total..... \$600,000.00	Total..... \$275,000.00
Advanced to temporary special disbursing agents..... 74,692.59		
Total expenditures to August 31, 1909.... 588,062.90		
Less repayments..... 29.66		
Net amount disbursed..... 588,033.24		
Liabilities outstanding August 31, 1909, estimated..... 11,437.78		
Unexpended balance..... \$599,471.02		
Total..... 600,000.00		
Expenditures, distributed as follows:	Allotments distributed as follows:	To be expended for the following projects:
General engineering supervision, office, and field (to November 30, 1908, only):	General supervision: No allotment for 1910.	General supervision: No provision for 1911.
Salaries..... \$6,196.79		
Travel, station, and field expenses..... 6,766.09		
Rent or storage charge..... 47.00		
13,009.88		
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 1.	DISTRICT 1.	DISTRICT 1.
(Headquarters, Missoula, Mont.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$3,500.00	Salaries..... \$5,125.00	No provision under this appropriation.
Travel, station, and field expenses..... 672.34	Travel and field expenses..... 2,100.00	
Drafting—Salaries..... \$4,172.34	Drafting—Salaries..... \$7,225.00	
2,041.67	3,500.00	
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Absaroka, Mont..... \$3,072.81	Absaroka, Mont..... \$2,107.25	Absaroka, Mont..... \$1,550.00
Beartooth, Mont..... 1,955.59	Beartooth, Mont..... 1,466.45	Beartooth, Mont..... 1,084.00
Beaverhead, Mont..... 4,988.83	Beaverhead, Mont..... 4,197.75	Beaverhead, Mont..... 3,163.00
Bitterroot, Mont..... 3,846.62	Bitterroot, Mont..... 4,010.00	Bitterroot, Mont..... 2,885.00
Blackfeet, Mont..... 6,824.73	Blackfeet, Mont..... 7,131.15	Blackfeet, Mont..... 3,092.00
Cabinet, Mont..... 4,087.82	Cabinet, Mont..... 3,493.00	Cabinet, Mont..... 1,617.00
Clearwater, Idaho..... 9,545.89	Clearwater, Idaho..... 8,470.00	Clearwater, Idaho..... 4,253.00
Coeur d'Alene, Idaho..... 8,659.79	Coeur d'Alene, Idaho..... 5,685.00	Coeur d'Alene, Idaho..... 2,592.00
Custer, Mont..... 2,036.00	Custer, Mont..... 1,200.00	Custer, Mont..... 940.00
Dakota, N. Dak..... 40.00	Dakota, N. Dak..... 40.00	Dakota, N. Dak..... 52.00
Deerlodge, Mont..... 3,475.89	Deerlodge, Mont..... 2,439.00	Deerlodge, Mont..... 2,757.00
Flathead, Mont..... 7,073.18	Flathead, Mont..... 7,706.50	Flathead, Mont..... 3,314.00
Gallatin, Mont..... 2,989.04	Gallatin, Mont..... 2,300.00	Gallatin, Mont..... 1,436.00
Helena, Mont..... 2,883.74	Helena, Mont..... 2,268.00	Helena, Mont..... 1,468.00
Jefferson, Mont..... 3,771.43	Jefferson, Mont..... 2,796.00	Jefferson, Mont..... 1,980.00
Kaniksu, Idaho..... 3,559.68	Kaniksu, Idaho..... 3,630.00	Kaniksu, Idaho..... 2,121.00
Kootenai, Mont..... 6,492.07	Kootenai, Mont..... 5,847.00	Kootenai, Mont..... 3,123.00
Lewis and Clark, Mont..... 2,726.94	Lewis and Clark, Mont..... 1,900.00	Lewis and Clark, Mont..... 1,339.00
Lolo, Mont..... 4,014.58	Lolo, Mont..... 4,140.00	Lolo, Mont..... 2,415.00
Madison, Mont..... 3,443.32	Madison, Mont..... 2,322.40	Madison, Mont..... 1,747.00
Marquette, Mich..... 775.00	Marquette, Mich..... 887.00	Marquette, Mich..... 180.00
Michigan, Mich..... 775.00	Michigan, Mich..... 887.00	Michigan, Mich..... 180.00
Minnesota, Minn..... 4,257.67	Minnesota, Minn..... 3,983.50	Minnesota, Minn..... 460.00
Missoula, Mont..... 5,935.54	Missoula, Mont..... 6,225.00	Missoula, Mont..... 1,958.00
Nezperce, Idaho..... 4,688.75	Nezperce, Idaho..... 3,678.05	Nezperce, Idaho..... 3,078.00
Pend Oreille, Idaho..... 816.84	Pend Oreille, Idaho..... 732.00	Pend Oreille, Idaho..... 2,295.00
Sioux, Mont..... 102.50	Sioux, Mont..... 2,740.00	Sioux, Mont..... 393.00
Superior, Minn..... 102.50	Superior, Minn..... 3,869.95	Superior, Minn..... 1,608.00
102,024.25	95,275.00	52,400.00
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters..... 56,768.10	1. Construction and repair of ranger stations and Forest headquarters..... 40,472.82	1. Construction and repair of ranger stations and Forest headquarters..... 5,575.00
2. Construction and repair of telephone lines..... 5,989.49	2. Construction and repair of telephone lines..... 12,557.25	2. Construction and repair of telephone lines..... 11,010.00
3. Construction and repair of drift fences, corrals, tanks, etc..... 832.66	3. Construction and repair of drift fences, corrals, tanks, etc..... 3,610.91	3. Construction and repair of drift fences, corrals, tanks, etc..... 2,150.00
4. Construction and repair of roads, trails, bridges, and fire lanes..... 36,982.01	4. Construction and repair of roads, trails, bridges, and fire lanes..... 35,042.15	4. Construction and repair of roads, trails, bridges, and fire lanes..... 33,665.00
5. Permanent equipment and tools for exclusive use in improvement work..... 1,451.99	5. Permanent equipment and tools for exclusive use in improvement work..... 3,591.87	
Total..... 102,024.25	Total..... 95,275.00	Total for District 1..... 52,400.00
Supervision and drafting..... 6,214.01	Supervision and drafting..... 10,725.00	
Total expended in District 1..... 108,238.26	Total allotted to District 1... 106,000.00	

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Improvement of the National Forests, 1909, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1910, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1911, \$275,000—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 2.	DISTRICT 2.	DISTRICT 2.
(Headquarters, Denver, Colo.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$2,354.17	Salaries..... \$3,200.00	No provision under this appropriation.
Travel, field, and station expenses..... 1,172.82	Travel, field, and station expenses..... 2,100.00	
Drafting—Salaries..... \$3,526.99	Drafting—Salaries..... \$5,300.00	
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Arapaho, Colo..... \$2,699.67	Arapaho, Colo..... \$1,975.70	Arapaho, Colo..... \$1,670.00
Battlement, Colo..... 2,910.07	Battlement, Colo..... 1,804.79	Battlement, Colo..... 1,633.00
Bighorn, Wyo..... 2,468.11	Bighorn, Wyo..... 3,627.06	Bighorn, Wyo..... 1,819.00
Black Hills, S. Dak..... 3,277.71	Black Hills, S. Dak..... 3,152.21	Black Hills, S. Dak..... 2,229.00
Bonneville, Wyo..... 2,409.05	Bonneville, Wyo..... 3,797.04	Bonneville, Wyo..... 1,024.00
Cheyenne, Wyo..... 2,063.03	Cheyenne, Wyo..... 2,564.21	Cheyenne, Wyo..... 1,331.00
Cochetopa, Colo..... 3,902.91	Cochetopa, Colo..... 1,698.40	Cochetopa, Colo..... 2,015.00
Gunnison, Colo..... 4,218.90	Gunnison, Colo..... 1,361.92	Gunnison, Colo..... 1,899.00
Hayden, Wyo..... 1,688.37	Hayden, Wyo..... 1,137.67	Hayden, Wyo..... 1,003.00
Holy Cross, Colo..... 1,950.73	Holy Cross, Colo..... 1,556.32	Holy Cross, Colo..... 1,106.00
Kansas, Kans..... 781.23	Kansas, Kans..... 283.14	Kansas, Kans..... 366.00
Las Animas, Colo..... 807.65	Las Animas, Colo..... 822.00	Las Animas, Colo..... 482.00
Leadville, Colo..... 3,583.59	Leadville, Colo..... 3,008.99	Leadville, Colo..... 2,272.00
Medicine Bow, Colo..... 2,286.31	Medicine Bow, Colo..... 1,517.17	Medicine Bow, Colo..... 1,337.00
Montezuma, Colo..... 4,022.28	Montezuma, Colo..... 2,808.07	Montezuma, Colo..... 2,361.00
Nebraska, Nebr..... 949.83	Nebraska, Nebr..... 1,044.81	Nebraska, Nebr..... 750.00
Pike, Colo..... 6,375.23	Pike, Colo..... 2,889.19	Pike, Colo..... 2,032.00
Rio Grande, Colo..... 4,460.98	Rio Grande, Colo..... 3,018.27	Rio Grande, Colo..... 2,066.00
Routt, Colo..... 3,663.92	Routt, Colo..... 2,665.22	Routt, Colo..... 2,137.00
San Isabel, Colo..... 1,766.83	San Isabel, Colo..... 1,752.96	San Isabel, Colo..... 1,254.00
San Juan, Colo..... 4,618.76	San Juan, Colo..... 3,630.00	San Juan, Colo..... 2,436.00
Shoshone, Wyo..... 5,672.53	Shoshone, Wyo..... 4,893.29	Shoshone, Wyo..... 2,168.00
Sopris, Colo..... 1,930.77	Sopris, Colo..... 1,851.33	Sopris, Colo..... 1,280.00
Sundance, Wyo..... 553.92	Sundance, Wyo..... 770.85	Sundance, Wyo..... 450.00
Uncompahgre, Colo..... 3,161.17	Uncompahgre, Colo..... 2,385.11	Uncompahgre, Colo..... 1,967.00
White River, Colo..... 3,187.76	White River, Colo..... 2,860.81	White River, Colo..... 1,913.00
	Contingent fund..... 3,623.47	
75,441.31	62,500.00	\$41,000.00
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters..... 49,160.47	1. Construction and repair of ranger stations and Forest headquarters..... 26,550.00	1. Construction and repair of ranger stations and Forest headquarters..... 6,196.00
2. Construction and repair of telephone lines..... 12,453.19	2. Construction and repair of telephone lines..... 8,237.50	2. Construction and repair of telephone lines..... 10,148.00
3. Construction and repair of drift fences, corrals, tanks, etc..... 4,416.62	3. Construction and repair of drift fences, corrals, tanks, etc..... 2,368.75	3. Construction and repair of drift fences, corrals, tanks, etc..... 1,662.00
4. Construction and repair of roads, trails, bridges, and fire lanes..... 9,231.14	4. Construction and repair of roads, trails, bridges, and fire lanes..... 22,987.50	4. Construction and repair of roads, trails, bridges, and fire lanes..... 22,994.00
5. Permanent equipment and tools for exclusive use in improvement work..... 179.89	5. Permanent equipment and tools for exclusive use in improvement work..... 2,356.25	
Total..... 75,441.31	Total..... 62,500.00	
Supervision and drafting..... 5,856.44	Supervision and drafting..... 9,500.00	
Total expended in District 2..... 81,297.75	Total allotted to District 2..... 72,000.00	Total estimated for District 2..... 41,000.00
DISTRICT 3.	DISTRICT 3.	DISTRICT 3.
(Headquarters, Albuquerque, N. Mex.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$2,035.00	Salaries..... \$4,200.00	No provision under this appropriation.
Travel, field, and station expenses..... 225.00	Travel, field, and station expenses..... 2,000.00	
Drafting—Salaries..... \$2,260.00	Drafting—Salaries..... \$6,200.00	
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Alamo, N. Mex..... \$3,775.83	Alamo, N. Mex..... \$4,326.00	Alamo, N. Mex..... \$2,383.00
Apache, Ariz..... 4,267.30	Apache, Ariz..... 5,108.00	Apache, Ariz..... 2,820.00
Arkansas, Ark..... 3,508.26	Arkansas, Ark..... 4,758.00	Arkansas, Ark..... 2,618.00
Carson, N. Mex..... 3,088.02	Carson, N. Mex..... 3,500.00	Carson, N. Mex..... 2,188.00
Chiricahua, Ariz..... 2,112.06	Chiricahua, Ariz..... 1,900.00	Chiricahua, Ariz..... 735.00
Choctawhatchee, Fla..... 13,706.53	Choctawhatchee, Fla..... 9,375.00	Choctawhatchee, Fla..... 700.00
Coconino, Ariz..... 3,210.24	Coconino, Ariz..... 2,764.00	Coconino, Ariz..... 5,847.00
Coronado, Ariz..... 2,421.01	Coronado, Ariz..... 2,344.00	Coronado, Ariz..... 1,521.00
Crook, Ariz..... 6,519.34	Crook, Ariz..... 8,247.32	Crook, Ariz..... 1,242.00
Datil, N. Mex..... 2,099.72	Datil, N. Mex..... 2,040.00	Datil, N. Mex..... 4,520.00
Garces, Ariz..... 5,700.57	Garces, Ariz..... 5,096.00	Garces, Ariz..... 1,015.00
Gila, N. Mex..... 2,510.26	Gila, N. Mex..... 2,700.00	Gila, N. Mex..... 2,806.00
Jemez, N. Mex..... 1,809.89	Jemez, N. Mex..... 1,939.00	Jemez, N. Mex..... 1,486.00
Lincoln, N. Mex..... 2,250.79	Lincoln, N. Mex..... 1,459.50	Lincoln, N. Mex..... 1,068.00
Luquillo, P. R..... 3,039.08	Luquillo, P. R..... 1,526.00	Luquillo, P. R..... 925.00
Manzano, N. Mex..... 1,453.89	Manzano, N. Mex..... 4,400.00	Manzano, N. Mex..... 925.00
Ocala, Fla..... 4,519.09	Ocala, Fla..... 1,700.00	Ocala, Fla..... 2,400.00
Ozark, Ark..... 2,930.66	Ozark, Ark..... 4,550.00	Ozark, Ark..... 980.00
Pecos, N. Mex..... 2,930.66	Pecos, N. Mex..... 4,550.00	Pecos, N. Mex..... 2,427.00
Prescott, Ariz..... 2,930.66	Prescott, Ariz..... 4,550.00	Prescott, Ariz..... 2,427.00
Sitgreaves, Ariz..... 2,930.66	Prescott, Ariz..... 4,550.00	Prescott, Ariz..... 2,427.00

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Improvement of the National Forests, 1909, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1910, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1911, \$275,000—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 3—Continued.	DISTRICT 3—Continued.	DISTRICT 3—Continued.
Tonto, Ariz..... \$7,524.98	Sitgreaves, Ariz..... \$4,200.00	Sitgreaves, Ariz..... \$2,216.00
Wichita, Okla..... 633.50	Tonto, Ariz..... 6,000.00	Tonto, Ariz..... 3,322.00
Zuni, N. Mex.....	Wichita, Okla..... 800.00	Wichita, Okla..... 96.00
	Zuni, N. Mex..... 2,550.00	Zuni, N. Mex..... 1,455.00
	Contingent fund..... 2,029.26	
	\$83,912.08	\$44,900.00
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters..... 56,480.43	1. Construction and repair of ranger stations and Forest headquarters..... 35,645.85	1. Construction and repair of ranger stations and Forest headquarters..... 3,313.00
2. Construction and repair of telephone lines..... 6,278.00	2. Construction and repair of telephone lines..... 11,059.62	2. Construction and repair of telephone lines..... 8,257.00
3. Construction and repair of drift fences, corrals, tanks, etc..... 6,588.90	3. Construction and repair of drift fences, corrals, tanks, etc..... 3,180.26	3. Construction and repair of drift fences, corrals, tanks, etc..... 829.00
4. Construction and repair of roads, trails, bridges, and fire lanes..... 6,854.65	4. Construction and repair of roads, trails, bridges, and fire lanes..... 30,862.86	4. Construction and repair of roads, trails, bridges, and fire lanes..... 32,501.00
5. Permanent equipment and tools for exclusive use in improvement work..... 929.04	5. Permanent equipment and tools for exclusive use in improvement work..... 3,163.49	
Total..... 77,131.02	Total..... 83,912.08	
Supervision and drafting..... 3,867.64	Supervision and drafting..... 10,087.92	
Total expended in District 3..... 80,998.66	Total allotted to District 3... 94,003.00	Total estimated for District 3. 44,900.00
DISTRICT 4.	DISTRICT 4.	DISTRICT 4.
(Headquarters, Ogden, Utah.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$1,987.50	Salaries..... \$1,800.00	No provision under this appropriation.
Travel, field, and station expenses..... 430.44	Travel, field, and station expenses..... 1,200.00	
Drafting—Salaries..... \$2,417.94		
	\$3,000.00	
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Ashley, Utah..... \$3,038.91	Ashley, Utah..... \$3,013.38	Ashley, Utah..... \$1,124.00
Boise, Idaho..... 5,125.28	Boise, Idaho..... 4,086.18	Boise, Idaho..... 2,341.00
Cache, Idaho..... 1,998.26	Cache, Idaho..... 2,016.61	Cache, Idaho..... 1,647.00
Caribou, Idaho..... 2,515.81	Caribou, Idaho..... 4,108.85	Caribou, Idaho..... 670.00
Challis, Idaho..... 4,240.31	Challis, Idaho..... 4,045.27	Challis, Idaho..... 2,014.00
Dixie, Ariz..... 3,675.79	Dixie, Ariz..... 3,957.91	Dixie, Ariz..... 1,673.00
Fillmore, Utah..... 2,584.55	Fillmore, Utah..... 1,775.89	Fillmore, Utah..... 1,503.00
Fishlake, Utah..... 1,946.37	Fishlake, Utah..... 2,912.25	Fishlake, Utah..... 1,380.00
Humboldt, Nev..... 1,914.89	Humboldt, Nev..... 3,651.08	Humboldt, Nev..... 1,671.00
Idaho, Idaho..... 5,452.68	Idaho, Idaho..... 4,149.00	Idaho, Idaho..... 1,689.00
Kaibab, Ariz..... 6,110.95	Kaibab, Ariz..... 3,774.78	Kaibab, Ariz..... 1,874.00
La Sal, Utah..... 1,510.68	La Sal, Utah..... 1,451.93	La Sal, Utah..... 846.00
Lemhi, Idaho..... 4,667.96	Lemhi, Idaho..... 3,552.95	Lemhi, Idaho..... 1,752.00
Manti, Utah..... 2,786.62	Manti, Utah..... 2,530.00	Manti, Utah..... 984.00
Moapa, Nev.....	Moapa, Nev.....	Moapa, Nev.....
Minidoka, Idaho..... 2,049.97	Minidoka, Idaho..... 2,571.80	Minidoka, Idaho..... 1,742.00
Nebo, Utah..... 713.81	Nebo, Utah..... 560.00	Nebo, Utah..... 200.00
Nevada, Nev.....	Nevada, Nev..... 4,582.40	Nevada, Nev..... 1,500.00
Payette, Idaho..... 3,434.92	Payette, Idaho..... 2,979.50	Payette, Idaho..... 1,963.00
Pocatello, Idaho..... 1,514.23	Pocatello, Idaho..... 1,364.56	Pocatello, Idaho..... 875.00
Powell, Utah..... 2,413.03	Powell, Utah..... 2,460.00	Powell, Utah..... 1,220.00
Salmon, Idaho..... 6,004.57	Salmon, Idaho..... 5,280.90	Salmon, Idaho..... 1,828.00
Sawtooth, Idaho..... 4,771.93	Sawtooth, Idaho..... 4,332.48	Sawtooth, Idaho..... 2,242.00
Sevier, Utah..... 2,187.59	Sevier, Utah..... 2,418.57	Sevier, Utah..... 1,171.00
Targhee, Idaho..... 4,686.23	Targhee, Idaho..... 4,677.17	Targhee, Idaho..... 1,678.00
Teton, Wyo..... 6,222.45	Teton, Wyo..... 5,318.00	Teton, Wyo..... 2,080.00
Toiyabe, Nev..... 3,522.75	Toiyabe, Nev..... 4,632.19	Toiyabe, Nev..... 1,478.00
Uinta, Utah..... 2,795.83	Uinta, Utah..... 3,111.71	Uinta, Utah..... 2,035.00
Wasatch, Utah..... 596.37	Wasatch, Utah..... 1,354.77	Wasatch, Utah..... 1,004.00
Weiser, Idaho..... 2,592.27	Weiser, Idaho..... 3,089.00	Weiser, Idaho..... 1,877.00
Wyoming, Wyo..... 3,800.20	Wyoming, Wyo..... 3,419.50	Wyoming, Wyo..... 1,634.00
	Contingent fund..... 1,771.37	
	99,000.00	\$45,700.00
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters..... 53,376.98	1. Construction and repair of ranger stations and Forest headquarters..... 42,055.20	1. Construction and repair of ranger stations and Forest headquarters..... 4,684.00
2. Construction and repair of telephone lines..... 13,107.95	2. Construction and repair of telephone lines..... 13,048.20	2. Construction and repair of telephone lines..... 11,598.00
3. Construction and repair of drift fences, corrals, tanks, etc..... 4,065.22	3. Construction and repair of drift fences, corrals, tanks, etc..... 3,752.10	3. Construction and repair of drift fences, corrals, tanks, etc..... 2,443.00
4. Construction and repair of roads, trails, bridges, and fire lanes..... 24,325.06	4. Construction and repair of roads, trails, bridges, and fire lanes..... 36,412.20	4. Construction and repair of roads, trails, bridges, and fire lanes..... 26,975.00
Total..... 94,875.21	Total..... 99,000.00	
Supervision and drafting..... 4,653.34	Supervision..... 3,000.00	
Total expended in District 4..... 99,528.55	Total allotted to District 4... 102,000.00	Total estimated for District 4... 45,700.00

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Improvement of the National Forests, 1909, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1910, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1911, \$275,000—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 5.	DISTRICT 5.	DISTRICT 5.
(Headquarters, San Francisco, Cal.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$3,022.77	No allotment from this appropriation.	No provision under this appropriation.
Travel, field, and station expenses..... 2,047.83		
Drafting—salaries..... 2,625.01		
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Angeles, Cal..... 9,888.35	Angeles, Cal..... \$8,352.00	Angeles, Cal..... \$4,101.00
California, Cal..... 3,443.84	California, Cal..... 3,834.00	California, Cal..... 2,027.00
Cleveland, Cal..... 2,754.74	Cleveland, Cal..... 6,905.00	Cleveland, Cal..... 2,391.00
Inyo, Cal..... 4,421.46	Inyo, Cal..... 4,000.00	Inyo, Cal..... 2,275.00
Klamath, Cal..... 6,823.81	Klamath, Cal..... 7,916.00	Klamath, Cal..... 3,898.00
Lassen, Cal..... 4,980.50	Lassen, Cal..... 3,800.00	Lassen, Cal..... 2,080.00
Modoc, Cal..... 4,057.85	Modoc, Cal..... 4,415.00	Modoc, Cal..... 2,176.00
Mono, Cal..... 2,078.36	Mono, Cal..... 3,625.00	Mono, Cal..... 1,932.00
Monterey, Cal..... 1,849.60	Monterey, Cal..... 1,157.00	Monterey, Cal..... 580.00
Plumas, Cal..... 4,540.49	Plumas, Cal..... 4,500.00	Plumas, Cal..... 2,123.00
San Luis, Cal..... 1,088.25	San Luis, Cal..... 4,561.00	San Luis, Cal..... 354.00
Santa Barbara, Cal..... 7,463.75	Santa Barbara, Cal..... 4,561.00	Santa Barbara, Cal..... 2,203.00
Sequoia, Cal..... 10,152.73	Sequoia, Cal..... 9,000.00	Sequoia, Cal..... 4,471.00
Shasta, Cal..... 4,279.31	Shasta, Cal..... 5,300.00	Shasta, Cal..... 3,092.00
Sierra, Cal..... 7,522.90	Sierra, Cal..... 8,450.00	Sierra, Cal..... 2,914.00
Stanislaus, Cal..... 4,662.01	Stanislaus, Cal..... 3,350.00	Stanislaus, Cal..... 1,787.00
Tahoe, Cal..... 5,912.79	Tahoe, Cal..... 7,755.00	Tahoe, Cal..... 2,897.00
Trinity, Cal..... 6,330.67	Trinity, Cal..... 9,080.00	Trinity, Cal..... 3,599.00
92,251.41	\$96,000.00	\$44,900.00
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters..... 39,434.37	1. Construction and repair of ranger stations and Forest headquarters..... 40,780.80	1. Construction and repair of ranger stations and Forest headquarters..... 5,287.00
2. Construction and repair of telephone lines..... 19,646.12	2. Construction and repair of telephone lines..... 12,652.80	2. Construction and repair of telephone lines..... 8,318.00
3. Construction and repair of drift fences, corrals, tanks, etc.. 2,849.30	3. Construction and repair of drift fences, corrals, tanks, etc..... 3,638.40	3. Construction and repair of drift fences, corrals, tanks, etc..... 1,062.00
4. Construction and repair of roads, trails, bridges, and fire lanes..... 30,321.62	4. Construction and repair of roads, trails, bridges, and fire lanes..... 35,308.80	4. Construction and repair of roads, trails, bridges, and fire lanes..... 30,233.00
Total..... 92,251.41	5. Permanent equipment and tools for exclusive use in improvement work..... 3,619.20	Total estimated for District 5... 44,900.00
Supervision and drafting..... 7,695.61	Total allotted to District 5... 96,000.00	
Total expended in District 5..... 99,947.02		
DISTRICT 6.	DISTRICT 6.	DISTRICT 6.
(Headquarters, Portland, Oreg.)		
Supervision of engineering:	Supervision of engineering:	Supervision of engineering:
Salaries..... \$3,355.00	Salaries..... \$3,900.00	No provision under this appropriation.
Travel, field, and station expenses..... 1,041.45	Travel, field, and station expenses..... 1,800.00	
Drafting—salaries..... 2,508.34	Drafting—salaries..... 4,300.00	
Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:	Construction and maintenance of permanent improvements on the National Forests, as follows:
Cascade, Oreg..... 6,121.53	Cascade, Oreg..... 6,646.50	Cascade, Oreg..... \$2,284.00
Chelan, Wash..... 7,007.63	Chelan, Wash..... 7,855.50	Chelan, Wash..... 1,595.00
Chugach and Tongass, Alaska..... 11,300.00	Chugach and Tongass, Alaska..... 5,000.00	Chugach, Alaska..... 1,804.00
Columbia, Wash..... 3,596.43	Columbia, Wash..... 4,528.00	Columbia, Wash..... 1,344.00
Colville, Wash..... 2,594.42	Colville, Wash..... 3,076.00	Colville, Wash..... 2,191.00
Crater, Oreg..... 4,405.19	Crater, Oreg..... 4,400.00	Crater, Oreg..... 4,552.00
Deschutes, Oreg..... 4,903.02	Deschutes, Oreg..... 5,049.00	Deschutes, Oreg..... 1,633.00
Fremont, Oreg..... 3,938.53	Fremont, Oreg..... 4,946.00	Fremont, Oreg..... 2,187.00
Malheur, Oreg..... 3,109.05	Malheur, Oreg..... 4,026.00	Malheur, Oreg..... 1,535.00
Olympic, Wash..... 5,323.34	Olympic, Wash..... 7,985.00	Olympic, Wash..... 1,583.00
Oregon, Oreg..... 6,922.63	Oregon, Oreg..... 6,720.00	Oregon, Oreg..... 1,864.00
Rainier, Wash..... 5,569.88	Rainier, Wash..... 5,653.00	Rainier, Wash..... 1,298.00
Siskiyou, Oreg..... 4,140.09	Siskiyou, Oreg..... 4,983.00	Siskiyou, Oreg..... 2,665.00
Siuslaw, Oreg..... 3,536.33	Siuslaw, Oreg..... 3,587.00	Siuslaw, Oreg..... 883.00
Snoqualmie, Wash..... 5,476.37	Snoqualmie, Wash..... 5,601.50	Snoqualmie, Wash..... 4,330.00
Tongass, Alaska (see Chugach)..... 1,727.91	Tongass, Alaska (see Chugach)..... 2,026.50	Tongass, Alaska..... 1,120.00
Umatilla, Oreg..... 6,230.45	Umatilla, Oreg..... 5,890.50	Umatilla, Oreg..... 988.00
Umpqua, Oreg..... 5,321.49	Umpqua, Oreg..... 5,890.50	Umpqua, Oreg..... 2,257.00
Wallowa, Oreg..... 4,984.52	Wallowa, Oreg..... 5,362.50	Wallowa, Oreg..... 1,650.00
Washington, Wash..... 2,602.28	Washington, Wash..... 5,823.50	Washington, Wash..... 1,657.00
Wenaha, Oreg..... 5,104.98	Wenaha, Oreg..... 2,966.00	Wenaha, Oreg..... 1,312.00
Wenatchee, Wash..... 5,600.04	Wenatchee, Wash..... 5,534.00	Wenatchee, Wash..... 3,790.00
Whitman, Oreg..... 5,600.04	Whitman, Oreg..... 4,430.50	Whitman, Oreg..... 1,578.00
109,516.11	Contingent fund..... 8,000.00	\$46,100.00
	120,000.00	

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Improvement of the National Forests, 1909, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1910, \$600,000—Continued.</i>	<i>Improvement of the National Forests, 1911, \$275,000—Continued.</i>
DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.	DISTRICT OFFICES—Continued.
DISTRICT 6—Continued.	DISTRICT 6—Continued.	DISTRICT 6—Continued.
Supervision of engineering—Continued. Classified under the following general headings:	Supervision of engineering—Continued. Classified under the following general headings:	Supervision of engineering—Continued. Classified under the following general headings:
1. Construction and repair of ranger stations and forest headquarters.....	1. Construction and repair of ranger stations and Forest headquarters.....	1. Construction and repair of ranger stations and Forest headquarters.....
2. Construction and repair of telephone lines.....	2. Construction and repair of telephone lines.....	2. Construction and repair of telephone lines.....
3. Construction and repair of drift fences, corrals, tanks, etc.....	3. Construction and repair of drift fences, corrals, tanks, etc.....	3. Construction and repair of drift fences, corrals, tanks, etc.....
4. Construction and repair of roads, trails, bridges, and fire lanes.....	4. Construction and repair of roads, trails, bridges, and fire lanes.....	4. Construction and repair of roads, trails, bridges, and fire lanes.....
5. Permanent equipment and tools for exclusive use in improvement work.....	5. Permanent equipment and tools for exclusive use in improvement work.....	
Total.....	Total.....	Total estimated for District 6.....
Supervising and drafting.....	Supervision and drafting.....	
Total expended in District 6.....	Total allotted to District 6.....	
SUMMARY.	SUMMARY.	SUMMARY.
General.....	District 1.....	District 1.....
District 1.....	District 2.....	District 2.....
District 2.....	District 3.....	District 3.....
District 3.....	District 4.....	District 4.....
District 4.....	District 5.....	District 5.....
District 5.....	District 6.....	District 6.....
District 6.....	Appropriation.....	Total.....
Unexpended balance.....		
Appropriation.....		
The above amounts were expended in States and Territories as follows:	Allotted to States and Territories as follows:	To be allotted to States and Territories as follows:
Alaska.....	Alaska.....	Alaska.....
Arizona.....	Arizona.....	Arizona.....
Arkansas.....	Arkansas.....	Arkansas.....
California.....	California.....	California.....
Colorado.....	Colorado.....	Colorado.....
Florida.....	Florida.....	Florida.....
Idaho.....	Idaho.....	Idaho.....
Kansas.....	Kansas.....	Kansas.....
Michigan.....	Michigan.....	Michigan.....
Minnesota.....	Minnesota.....	Minnesota.....
Montana.....	Montana.....	Montana.....
Nebraska.....	Nebraska.....	Nebraska.....
Nevada.....	Nevada.....	Nevada.....
New Mexico.....	New Mexico.....	New Mexico.....
North Dakota.....	North Dakota.....	North Dakota.....
Oklahoma.....	Oklahoma.....	Oklahoma.....
Oregon.....	Oregon.....	Oregon.....
Porto Rico.....	Porto Rico.....	Porto Rico.....
South Dakota.....	South Dakota.....	South Dakota.....
Utah.....	Utah.....	Utah.....
Washington.....	Washington.....	Washington.....
Wyoming.....	Wyoming.....	Wyoming.....
Total.....	Total.....	Total.....
General supervision, etc.....	General supervision.....	
Unexpended balance.....		
Grand total.....	Grand total.....	
Classified under the following general headings:	Classified under the following general headings:	Classified under the following general headings:
1. Construction and repair of ranger stations and Forest headquarters.....	1. Construction and repair of ranger stations and Forest headquarters.....	1. Construction and repair of ranger stations and Forest headquarters.....
2. Construction and repair of telephone lines.....	2. Construction and repair of telephone lines.....	2. Construction and repair of telephone lines.....
3. Construction and repair of drift fences, corrals, tanks, etc.....	3. Construction and repair of drift fences, corrals, tanks, etc.....	3. Construction and repair of drift fences, corrals, tanks, etc.....
4. Construction and repair of roads, trails, bridges, and fire lanes.....	4. Construction and repair of roads, trails, bridges, and fire lanes.....	4. Construction and repair of roads, trails, bridges, and fire lanes.....
5. Permanent equipment and tools for exclusive use in improvement work.....	5. Permanent equipment and tools for exclusive use in improvement work.....	
Total.....	Total.....	Total.....
Supervision and drafting.....	Supervision and drafting.....	
Unexpended balance.....		
Grand total.....	Grand total.....	
		Decrease, \$325,000.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Cooperative work, forest investigations, \$29,043.67.</i>	<i>Cooperative work, forest investigations, \$55,000.</i>	<i>Approximate estimate, \$50,000.</i>
Expenditures from amounts received and covered into the Treasury as contributions toward cooperative work in forest investigations (34 Stat. L., 684).	Contributions carried over from fiscal year 1909..... \$19,291.25	
	Received July 1, to September 30, 1909..... 20,698.64	
	Estimated additional received to June 30, 1910..... 15,010.11	
	<u>55,000.00</u>	
Expended for—	It is impracticable to make a definite allotment of this fund for salaries, expenses, etc., in advance.	This work being dependent on contributions, no classified and detailed estimate can be made in advance.
Salaries in Washington..... \$9,350.14		
Salaries out of Washington..... 658.62		
Miscellaneous services and supplies..... 7,554.72		
Furniture and equipment..... 13.00		
Apparatus, instruments, and laboratory material..... 665.20		
Travel, field, and station expenses..... 10,801.99		
<u>Total..... 29,043.67</u>		
Expended for projects as follows:	Grazing:	
Grazing—	No receipts; no estimate.	
Studies of the range and forage plants and of best methods for their use—Expenses..... 99.65		
Silviculture:	Silviculture:	
Planting plans, preliminary examinations of woodlots and timber lands, working plans, and studies of forest conditions, in cooperation with States, corporations, and private individuals—	Amounts carried from the fiscal year 1909 and received to September 30, 1909..... 29,650.35	
Salaries..... 5,811.13	Estimated additional receipts..... 10,349.65	
Travel, field, and station expenses..... 9,371.30	<u>Total..... 40,000.00</u>	
<u>Total..... 15,182.43</u>		
Products:	Products:	
Timber tests, studies and experiments in treating ties, telephone and telegraph poles, mine props, and other structural timbers, chemical analyses of woods and wood products, pulp woods experiments—	Amounts carried over from the fiscal year 1909, and received to September 30, 1909..... 10,339.54	
Salaries..... 4,191.63	Estimated additional receipts..... 4,660.46	
Travel, field, and station experiments..... 6,888.79	<u>Total..... 15,000.00</u>	
<u>Total..... 11,080.42</u>		
Unexpended balances returned to contributors..... 2,681.17		
<u>Total..... 29,043.67</u>	<u>Total..... 55,000.00</u>	
This money was received from contributors, as follows:		
Ayrshire Coal Co..... 15.00		
Alabama, State of..... 200.00		
Attha Tool Co..... 40.00		
Anaconda Cop. Mg. Co..... 200.00		
Barker, J. M..... 25.00		
Beattie, W. E..... 20.00		
Bower, G. S..... 10.00		
Buck Hill Falls Co..... 15.00		
Bunker Hill & Sullivan Mg. Co..... 1,792.08		
Babcock, E. S..... 25.00		
Bechtel, J. A..... 10.00		
Carr, Julian S..... 20.00		
Central Colo. Power Co..... 450.00		
Colo. Midland R. R. Co..... 254.39		
Cox, Abram, Stave Co..... 8.00		
Dayton C. & I. Co..... 75.00		
Delaware, L. & W. R. R..... 600.00		
Duncan Coal Co..... 30.00		
Eucalyptus Forest Co..... 35.00		
Florida, State of..... 200.00		
Finch, Pruyn & Co..... 300.00		
Forcite Works (Dupont de Nemours Powder Co)..... 20.00		
Fruitvale Farms Co..... 50.00		
Gibson, Mary K..... 25.00		
Glidden, Jos. W..... 50.00		
Gorham, W. R..... 15.00		
Graniteville Mfg. Co..... 50.00		
Great So. Lbr. Co..... 2,070.00		
Hall Estate (Inc.)..... 40.00		
Hamilton Web Co..... 15.00		
Hercules Mfg. Co..... 943.90		
Homestake Mg. Co..... 4,689.07		
Hunter, Dexter..... 50.00		
Houghton, Richard..... 25.00		
Howard, Mrs. E. S..... 50.00		
Indpls., Col. & So. Tr. Co..... 400.00		
Insull, Samuel..... 10.00		
Jacobs, S. & Sons..... 83.66		
Jamieson, John..... 50.00		
Jeffries, I. J..... 15.00		
Jones, E. M..... 100.00		
Jordan, Llewellyn..... 15.00		
Jory, Herbert G..... 15.00		
Kentucky, State of..... 2,000.00		
Knoblanck..... 25.00		
Lanier, C. D..... 50.00		
Law, Wm..... 10.00		
Michigan, State of..... 500.00		
Marshall, Henry..... 15.00		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (84 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Cooperative work, forest investigations, \$29,043.67—Continued.</i>	<i>Cooperative work, forest investigations, \$55,000—Continued.</i>	<i>Approximate estimate, \$50,000—Continued.</i>
Madison Coal Corpn.....		
Mellon, Jos. P.....		
Monroe Coal Mfg. Co.....		
Montana University of.....		
Natl. Mangnese Corpn.....		
Napier, Geo. M.....		
No. La. Tel. Co.....		
No. Pac. Ry. Co.....		
Patterson, Emily.....		
Pac. L. & P. Co.....		
Pfister & Vogel Leather Co.....		
Phila. & R. C. & I. Co.....		
Queens Run Firebrick Co.....		
Radford Iron Co.....		
Reed, S. F.....		
Reed, J. Davis.....		
Samson, Geo. R.....		
Searchlight Coal Co.....		
Spring Valley Coal Co.....		
Stackhouse, E. S.....		
Stony Wold Sanatorium.....		
Swift, Louis F.....		
Sutro, Estate of Adolf.....		
Talladega College.....		
Tennessee C. & I. Co.....		
Union Bag & Paper Co.....		
Venango Oil Land Co.....		
Wannamaker, J. E.....		
Wedgworth, W. M.....		
W. Va. Spruce Lbr. Co.....		
Willcoxson & Co., E. B.....		
Williamson, B. F.....		
Wood, Edw.....		
Wood, Wm. P.....		
Wilson, J. F.....		
Yellow Pine Mfr. Assn.....		
Yerkes Observatory.....		
Total received.....		
Contributed funds on hand July 1, 1908.....		
Total.....		
Carried over to be used during the fiscal year 1910.....		
Expended as above.....		
<i>Naval Stores Industry, Forest Service.</i>	<i>Naval Stores Industry, Forest Service.</i>	<i>Naval Stores Industry, Forest Service.</i>
To enable the Secretary of Agriculture to inquire into the destruction of forests by the production of turpentine and resin, and the sources and methods of said industry, and in cooperation with the Bureau of the Census to report upon the production of the naval stores industry (agricultural act May 23, 1908).	No new appropriation was made for the fiscal year 1910, but the balance of the 1909 appropriation carried over and available for expenditure was \$1,050.68.	
Total appropriation.....	Allotted as follows:	
Unexpended June 30, 1909, carried over to fiscal year 1910.....	Salary.....	
	Miscellaneous supplies and expenses.....	
Expended, fiscal year 1909.....		
Expenditures were as follows:		
Salaries in Washington.....		
Salaries out of Washington.....		
Miscellaneous supplies, etc.....		
Apparatus, laboratory material, etc.....		
Travel, field, and station expenses.....		
Projects as follows:	Projects:	
General supervision of turpentinizing studies and wood distillation experiments—salaries.....	Studies and experiments in turpentinizing and wood distillation—	
Turpentinizing studies:	Salaries.....	
Salaries.....	Field and station expenses.....	
Field and station expenses.....		
	Total.....	
Wood distillation experiments and studies:		
Salaries.....		
Field and station expenses.....		
Total.....		
<i>Paper tests, \$10,000.</i>	<i>Paper tests, \$9,560.50.</i>	<i>Paper tests, \$10,000.</i>
To enable the Secretary of Agriculture to test such plants as may require tests to ascertain if they be suitable for making paper (allotted to Forest Service, \$3,100).	Appropriated, \$10,000.00.	To be expended approximately as follows:
Expenditures were as follows:	Allotted to Forest Service, \$9,560.50.	Salaries.....
Salaries in Washington.....	Allotted as follows:	Miscellaneous expenses, etc.....
Miscellaneous supplies, etc.....	Salaries.....	
Gas and electricity.....	Miscellaneous expenses, etc.....	Total.....
Apparatus, instruments, and laboratory material.....		
	Total (allotted to Forest Service).....	
Unexpended balance.....		
Total.....		

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>National Bison Range, \$219.60.</i>	<i>National Bison Range, \$42,780.40.</i>	<i>National Bison Range.</i>
This appropriation was for the purchase of not to exceed 12,800 acres of land from unallotted lands embraced within the Flathead Indian Reservation, State of Montana, and the construction thereon of a good, substantial fence and the necessary sheds and buildings for a permanent National Bison Range for the herd of bison to be presented by the American Bison Society. Thirty thousand dollars was appropriated to enable the Secretary of the Interior to pay the Indians and others entitled the appraised value of the land and \$10,000 to enable the Secretary of Agriculture to build the fence, sheds, and buildings (agricultural act, May 23, 1908). Later \$3,000 was added to the appropriation to provide for additional cost of fence (deficiency appropriation, March 4, 1909). Total appropriation..... \$43,006.00 Carried over to 1910..... 42,780.40	The unexpended balance of the original appropriation was reappropriated to be expended "in fencing said lands, the erection thereon of the necessary sheds and buildings, and enlarging the limits heretofore established so as to make the total acreage not to exceed 20,000 acres" (agricultural act March 4, 1909). Allotted as follows: Purchase of land..... \$29,986.48 Miscellaneous supplies and services in construction of fence and buildings..... 12,793.92 Total..... 42,780.40	No estimate.
Expended, 1909..... 219.60		
Expenditures were as follows: Miscellaneous supplies and services..... 196.00 Travel, field, and station expenses..... 23.40 Total..... 219.60		
SUMMARY BY APPROPRIATIONS.	SUMMARY BY APPROPRIATIONS.	SUMMARY BY APPROPRIATIONS.
Expenditures: Salaries..... \$143,464.87 General expenses..... 3,139,399.35 Improvements..... 599,471.02 Unexpended balance to be returned to the Treasury..... 3,882,335.24 Total regular appropriations..... 3,896,200.00	Allotments: Salaries..... \$60,200.00 General expenses..... 3,876,159.14 Improvements..... 600,000.00 Total allotted..... 4,536,359.14 Contingent..... 109,840.86 Total regular appropriations (Increase, \$750,000.)..... 4,646,200.00 Miscellaneous appropriations: Cooperative work Forest Service (estimated)..... \$55,000.00 Naval stores industry..... 1,050.68 Paper tests (allotted to Forest Service)..... 9,560.50 National Bison Range..... 42,780.40 Refunds, etc. (estimated)..... 50,000.00 Payments to States, etc. (receipts for fiscal year 1909)..... 441,522.12 Payments to Uinta Indians..... 1,113.47 Total..... 5,247,227.17	Estimates: Salaries..... \$60,200.00 General expenses..... 4,708,500.00 Improvements..... 275,000.00 Total regular appropriations (Increase, \$397,500.)..... 5,043,700.00 Miscellaneous appropriations: Cooperative work Forest Service (no estimate). Naval stores industry (no estimate). Paper tests..... \$10,000.00 National Bison Range (no estimate). Refunds, etc. (estimated)..... 50,000.00 Payment to States, etc. (receipts 1910), (estimated)..... 600,000.00 Payments to Indians (no estimate). Total..... 5,703,700.00
Miscellaneous appropriations: Cooperative work forest investigations..... \$29,043.67 Naval stores industry..... 8,949.32 Paper tests (allotted to Forest Service), (unexpended balance, \$14.13)..... 3,100.00 National Bison Range..... 219.60 Refunds to depositors, excess deposits National Forest funds (34 Stat., 1270)..... 40,098.73 Payments to States and Territories, 25 per cent of receipts National Forest funds (agricultural act May 23, 1908), (receipts for 1908)..... 444,379.00 Payments to Uinta Indians, timber sale receipts (receipts for 1908), (33 Stat., 1070)..... 5,348.07 Total of all appropriations..... 4,427,338.39 Expenditures reimbursed by bureaus of other departments..... 15,239.41 Added to the above..... 4,427,338.39 Made a total available for expenditures of..... 4,442,577.80 Less unexpended balances as above..... 13,878.89 Leaves the total expenditures for the year for all purposes..... 4,428,698.91		

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Grazing trespass.	Special uses.	Fire trespass.	Gross receipts.	Refunds.	Net receipts.
Alaska.....	Chugach.....	\$4,495.55	.....	\$897.31	.....	.....	\$2.50	.....	\$5,395.36	\$614.64	\$4,780.72
	Tongass.....	6,015.35	.....	252.60	.....	.....	547.78	.....	6,815.73	319.46	6,496.27
	Total for Alaska.....	10,510.90	.....	1,149.91	.....	.....	550.28	.....	12,211.09	934.10	11,276.19
Arizona.....	Apache.....	1,678.85	.....	.....	\$10,047.45	.....	24.00	.....	11,750.30	11.48	11,738.82
	Chiricahua.....	853.07	.....	.....	2,059.00	.....	10.60	.....	2,922.67	700.01	2,222.66
	Coconino.....	20,983.66	.....	289.20	39,802.98	\$176.00	907.25	.....	62,159.09	2,326.26	59,832.83
	Coronado.....	1,063.76	.....	127.20	3,647.38	175.54	653.00	.....	5,066.88	53.38	5,013.50
	Crook.....	5,758.61	.....	6.00	6,196.07	.....	183.37	.....	12,144.05	94.75	12,049.30
	Dixie.....	286.22	.....	1,597.32	.....	.....	20.17	.....	1,903.71	4.58	1,899.13
	Garces.....	730.50	.....	35.00	5,100.30	21.70	59.25	.....	5,946.75	.36	5,946.39
	Kaibab.....	122.90	.....	4,850.10	.....	.....	20.00	.....	4,993.00	.....	4,993.00
	Prescott.....	2,865.70	\$44.14	605.42	19,954.69	50.00	520.65	.....	24,040.60	555.97	23,484.63
	Sitgreaves.....	368.15	.....	5.00	9,735.63	65.00	129.00	.....	10,302.78	114.50	10,188.28
	Tonto.....	738.21	.....	1.50	16,296.00	13.00	198.03	.....	17,246.74	1,952.15	15,294.59
	Zuni.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total for Arizona.....	35,449.63	44.14	1,069.32	119,286.92	501.24	2,725.32	.....	159,076.57	5,813.44	153,263.13
Arkansas.....	Arkansas.....	31.00	.....	4,738.38	53.25	.....	184.85	.....	5,008.08	60.00	4,948.08
	Ozark.....	142.09	.....	973.33	154.23	.....	143.05	.....	1,412.70	13.80	1,398.90
	Total for Arkansas.....	173.69	.....	5,711.71	207.48	.....	327.90	.....	6,420.78	73.80	6,346.98

Partly in another State. Receipts prorated according to area.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Grazing trespass.	Special uses.	Fire trespass.	Gross receipts.	Refunds.	Net receipts.
California.....	Angeles.....	\$2,625.25		\$554.77	\$1,906.15		\$4,499.65	\$19.00	\$9,604.82	\$171.62	\$9,433.20
	California.....	210.31		701.27	5,557.91		1,444.00		7,913.49	166.77	7,746.72
	Cleveland.....	162.50		73.75	2,726.15		345.10		3,307.50	145.00	3,162.50
	Crater ^a	314.69		.65	74.62		2.84		392.80	1.32	391.48
	Inyo ^a	5,578.13	\$52.20	594.21	4,195.68		612.49		11,032.71	290.96	10,741.75
	Klamath.....	4,319.16		53.09	2,210.72		177.80		6,707.77	53.61	6,707.16
	Lassen.....	39.00		54.10	6,241.75		139.58		6,474.43	113.38	6,361.05
	Modoc.....	1,204.49			11,081.12		46.00		12,331.61	505.06	11,826.55
	Mono ^a	22.28	112.40		3,541.03		547.58		4,223.29		4,223.29
	Monterey.....	3,545.10		7.50	893.05	\$20.00	26.00		4,491.65		4,491.65
	Plumas.....	21,179.80	28.00	1,111.76	6,900.05	8.00	118.00		29,345.61	36.90	29,308.71
	San Luis.....				1,156.60				1,156.60		1,156.60
	Santa Barbara.....	235.00			5,239.35	4.00	1,055.81		6,534.16	953.45	5,580.71
	Sequoia.....	2,902.73	326.52	952.93	12,734.33	8.00	6,848.32	1,280.00	23,052.83	360.98	24,085.85
	Shasta.....	6,968.73	37.47	91.83	2,612.16		63.25		9,773.44	2,644.23	7,129.21
	Sierra.....	12,959.84		6.53	4,390.00		440.00		17,796.37	541.14	17,255.23
	Siskiyou ^a	13.80		10.76	17.73	.08	.12		42.49	.17	42.32
	Stanislaus.....	5,554.83	1,622.30	293.98	5,466.25		1,624.64		14,562.00	334.05	14,227.95
	Tahoe ^a	8,986.20	610.50	3,315.95	8,824.09		1,508.86		23,305.60	411.09	22,894.51
	Trinity.....	394.88	15.81		3,846.85		154.00		4,411.54	339.29	4,072.25
	Total for California..	77,216.72	2,805.20	7,823.08	89,615.59	40.08	19,714.04	1,299.00	198,513.71	7,075.02	191,438.69
Colorado.....	Arapaho.....	6,782.59	111.13	307.50	1,778.15		95.00		9,074.37	637.51	8,436.86
	Battlement.....	500.00	20.80		9,751.85	126.70	142.33		10,541.68	20.00	10,521.68
	Cochetopa.....	4,754.27		21.98	7,617.85		47.15		12,441.25	50.68	12,390.57
	Gunnison.....	3,989.06		37.50	3,858.77				7,885.33	17.35	7,867.98
	Hayden ^a	554.30	3.00		2,822.91		7.39		3,387.60	29.60	3,358.00
	Holy Cross.....	17,325.66	68.74	1,599.79	3,733.90		70.75		22,798.84	1,272.35	21,526.49
	La Sal ^a	34.94	31.11		534.57		.20		600.82	.19	600.63
	Las Animas ^a	184.11		48.91	696.69		5.98	49.87	985.56		985.56
	Leadville.....	8,254.12	1,135.50	128.00	9,363.92		321.00		19,202.54	292.52	18,910.02
	Medicine Bow.....	1,790.75	162.00	615.60	1,457.66		339.50		4,365.51	328.68	4,036.83
	Montezuma.....	2,118.33	144.62	224.26	7,971.79	32.00	1,381.47		11,872.47	568.09	11,304.38
	Pike.....	10,862.56	401.98	232.04	6,913.50		673.55		19,083.63	730.42	18,353.21
	Rio Grande.....	2,276.28		19.10	17,665.75	92.00	150.40		20,208.53	639.35	19,569.18
	Routt.....	3,636.20			9,346.72	300.00	12.20		13,295.12	63.77	13,231.35
	San Isabel.....	835.99	8.74	72.80	3,629.30	95.00	31.65		4,673.48	120.75	4,552.73
	San Juan.....	702.46	15.75	795.72	14,135.45	127.88	320.00		16,097.26	1,629.43	14,467.83
	Sopris.....	767.98			584.65		13.75		1,366.38		1,366.38
	Uncompaggre.....	3,583.27		122.54	11,583.62	11.50	20.00		15,320.93	240.97	15,079.96
	White River.....	4,192.40	141.56		7,058.75	194.25	80.50		11,667.46	117.29	11,550.17
	Total for Colorado..	73,145.27	2,244.93	4,225.74	120,505.80	979.33	3,712.82	49.87	204,863.76	6,778.95	198,084.81
Idaho.....	Beaverhead ^a	220.21	.91	167.96	2,702.02		4.25		3,095.35	83.61	3,011.74
	Boise.....	4,343.16			9,685.47		39.00		14,067.63	615.00	13,452.63
	Cache ^a	1,230.77		18.91	5,460.07	9.98	12.88		6,732.61	352.04	6,380.57
	Caribou ^a	440.85		47.40	25,324.46	49.09	19.80		25,881.60	44.53	25,837.07
	Challis.....	1,456.90			4,659.25		42.80		6,158.95	170.00	5,988.95
	Clearwater.....	782.89	50.00		367.40		16.00		1,216.29	279.10	937.19
	Coeur d'Alene.....	19,114.53		4,669.83			252.00		24,036.36	1,620.26	22,416.10
	Idaho.....	21.41		123.20	8,671.16		21.00		8,836.77	149.75	8,687.02
	Kaniku ^a	727.73	69.95	2.91	12.85		53.81		867.25	25.27	841.98
	Lemhi.....	1,951.65		28.92	6,755.78	55.00	17.40		8,808.75	417.79	8,390.96
	Minidoka ^a	1,257.77		19.97	7,546.23		18.57		8,842.54	157.78	8,684.76
	Nez Perce.....	444.50	50.00		3,622.50		202.70		4,319.70		4,319.70
	Payette.....	3,194.32			7,469.75	100.00	39.50		10,803.57	20.00	10,783.57
	Pend Oreille.....	1,624.38		447.53	44.35		15.00		2,131.26		2,131.26
	Pocatello ^a	444.16		92.55	6,102.68	125.33	40.17		6,804.89		6,804.89
	Salmon.....	5,016.21			2,412.04		1.00		7,429.25	20.00	7,409.25
	Sawtooth.....	3,719.04			21,926.15		27.45		25,672.64	97.10	25,575.54
	Targhee ^a	7,773.53		58.37	12,235.81		97.56		20,165.27	589.39	19,575.88
	Weiser.....	4,714.71		5.00	9,683.17	45.00	68.00		14,515.88	174.10	14,341.78
	Total for Idaho.....	58,478.72	170.86	5,682.55	134,681.14	384.40	988.89		200,386.56	4,815.72	195,570.84
Kansas.....	Kansas.....				4,736.40				4,736.40	43.40	4,693.00
Minnesota.....	Minnesota.....			41.78			67.50		109.28	7.78	101.50
Montana.....	Absaroka.....	3,512.37		1,830.00	7,875.60		194.90		13,412.87	100.40	13,312.47
	Beartooth.....	2,597.08			2,393.90		94.55		5,085.53	365.04	4,720.49
	Beaverhead ^a	1,090.87	4.53	832.04	13,385.29		21.05		15,333.78	414.19	14,919.59
	Bitterroot.....	14,158.55	10,489.21	152.15	2,908.77		134.40		27,843.08	50.75	27,792.33
	Blackfeet.....	22,890.40			101.25		946.02		23,937.67	8.90	23,928.77
	Cabinet.....	580.65		6.97	98.20		25.00		710.82	42.80	668.02
	Custer.....	986.32			11,195.38		381.35		12,563.05	11.74	12,551.31
	Deerlodge.....	64,091.18	1,463.49	1,848.85	5,440.15		332.94		73,176.61	818.58	72,358.03
	Flathead.....	91.75			25.70		21.00		138.45		138.45
	Gallatin.....	4,945.06		2.59	5,459.83		96.80		10,504.28	146.07	10,358.21
	Helena.....	4,865.74	20.00	335.00	11,796.55		675.51		17,692.80	436.66	17,256.14
	Jefferson.....	7,423.99	43.00	29.99	9,188.80		169.15		16,854.93	1,891.94	14,962.99
	Kootenai.....	2.50		336.91	107.35		22.50		469.26	36.16	433.10
	Lewis and Clark.....	270.79			1,394.35		10.00		1,675.14		1,675.14
	Lolo.....	1,372.01	22,011.90	1,036.36	68.70		150.40		24,639.37	211.14	24,428.23
	Madison.....	1,104.98	2,004.45	17.55	11,402.30		278.63		14,807.91	93.10	14,714.81
	Missoula.....	50,652.50		182.67	2,907.80		111.00		53,853.97	164.27	53,689.70
	Sioux ^a	2,848.66		3.18	1,683.35		278.66		4,813.85	21.37	4,792.48
	Total for Montana...	183,485.40	36,036.58	6,614.26	87,433.27		3,943.86		317,513.37	4,813.11	312,700.26
Nebraska.....	Nebraska.....	76.85			11,209.25		58.75		11,404.85	55.50	11,349.35

^a Partly in another State. Receipts prorated according to area.

Classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year (34 Stat. L., 1270)—Continued.

Forest Service—Continued.

State.	Name of National Forest.	Timber sales.	Timber settlement.	Timber trespass.	Grazing.	Grazing trespass.	Special uses.	Fire trespass.	Gross receipts.	Refunds.	Net receipts.
Nevada.....	Humboldt.....	\$207.75			\$41,430.01	\$195.00	\$64.75		\$41,897.51	\$146.00	\$41,751.51
	Inyo ^a	239.09	\$2.24	\$25.47	179.84		26.26		472.90	12.47	460.43
	Moapa.....										
	Mono ^a	2.50	12.60		397.12		61.42		473.64		473.64
	Nevada.....	3,991.62		1,011.57			2.00		5,005.19		5,005.19
	Tahoe ^a	294.35	20.00	108.62	289.04		51.39		763.40	13.47	749.93
	Toiyabe.....	7,494.71		151.97	7,247.37		30.95		14,925.00	218.50	14,706.50
	Total for Nevada.....	12,230.02	34.84	1,297.63	49,543.38	195.00	236.77		63,537.64	390.44	63,147.20
New Mexico.....	Alamo.....	316.85		146.05	10,215.92	203.00	127.35		11,009.17	339.91	10,669.26
	Carson.....	594.25	150.00		14,926.51	25.00	41.75		15,737.51	81.07	15,656.44
	Chiricahua ^a	531.03			1,281.69		6.60		1,819.32	435.75	1,383.57
	Datil and Magdalena.....	2,571.03		44.25	18,589.94		101.80		21,307.02	18.10	21,288.92
	Gila.....	13,034.38		105.57	19,336.06	10.00	154.05		32,640.06	1,183.20	31,456.86
	Jemez.....	488.31		52.90	10,741.64	56.00	66.50	\$19.00	11,424.35	141.53	11,282.82
	Las Animas ^a	46		.12	1.71		.02		2.44		2.44
	Lincoln.....	664.59		116.50	5,886.53	25.00	125.00	75.00	6,892.62	283.91	6,608.71
	Manzano.....	543.15		107.74	4,503.24	102.00	33.80		5,289.93	33.28	5,256.65
	Pecos.....	1,133.21		11.86	2,553.97	8.00	19.80		3,726.84	253.90	3,472.94
	Zuni.....										
	Total for New Mexico.....	19,877.26	150.00	584.99	88,037.21	429.00	676.67	94.13	109,849.26	2,770.65	107,078.61
Oklahoma.....	Wichita.....	131.70			2,194.65		13.00		2,339.35		2,339.35
Oregon.....	Cascade.....	75.00			3,996.59		78.00		4,149.59		4,149.59
	Crater ^a	5,697.75		11.75	1,350.93		51.44		7,111.87	23.88	7,087.99
	Deschutes.....	488.66			13,061.34	488.22	23.26		14,061.48	3.50	14,057.98
	Fremont.....	2,524.81			15,083.48	20.00	9.00		17,637.29	147.00	17,490.29
	Malheur.....	527.19			13,478.73	50.00	37.10		14,093.02	31.87	14,061.15
	Oregon.....	4,952.92	304.52	41.31	4,262.40	30.00	236.10		9,827.25	44.61	9,782.64
	Siskiyou ^a	461.43		359.54	592.87	2.42	3.88		1,420.14	5.68	1,414.46
	Siuslaw.....	103.50			43.00				146.50		146.50
	Umatilla.....				9,400.97	50.00			9,450.97		9,450.97
	Umpqua.....		83.44		1,438.90		41.00		1,563.34	1.05	1,562.29
	Wallowa.....	750.00		477.96	29,178.76	205.00	112.80		30,724.52	630.78	30,093.74
	Wenaha ^a	139.96		33.46	6,119.41		30.42		6,323.25		6,323.25
	Whitman.....	1,603.26		261.75	14,884.38	75.00	120.75		16,945.14	84.11	16,861.03
	Total for Oregon.....	17,324.48	387.96	1,185.77	112,891.76	920.64	743.75		133,454.36	972.48	132,481.88
South Dakota.....	Black Hills.....	33,045.08		610.75	4,770.80	25.00	1,065.37		39,517.00	872.66	38,644.34
	Sioux ^a	1,990.77		2.22	1,176.40		194.74		3,364.13	14.93	3,349.20
	Total for South Dakota.....	35,035.85		612.97	5,947.20	25.00	1,260.11		42,881.13	887.59	41,993.54
Utah.....	Ashley ^a	1,311.42		54.73	6,107.49		11.94		7,485.58	^b 304.95	7,180.63
	Cache ^a	1,144.31		17.58	5,076.54	9.27	11.97		6,259.67	327.30	5,932.37
	Dixie ^a	213.78			1,193.01		15.03		1,421.87	3.42	1,418.45
	Fillmore.....	1,290.12		10.00	7,631.80		2.50		8,934.42	53.50	8,880.92
	Fishlake.....	2,484.50		4.42	9,565.74		57.57		12,112.23		12,112.23
	La Sal ^a	526.61	468.89		8,057.03		2.80		9,055.33	2.81	9,052.52
	Manti.....	5,517.87	55.54	48.00	21,810.89	10.00	27.00		27,469.30	524.66	26,944.64
	Minidoka ^a	238.08		3.78	1,428.36		3.53		1,673.75	29.87	1,643.88
	Nebo.....	72.05			4,821.90	50.00	10.00		4,953.95		4,953.95
	Pocatello ^a	16.54		3.45	227.25	4.67	1.50		253.41		253.41
	Powell.....	872.50			7,463.23		38.50		8,374.23		8,374.23
	Sevier.....	1,266.80			11,428.27		36.40		12,731.47	29.00	12,702.47
	Uinta.....	4,177.77		39.37	27,408.32	35.40			31,660.86	^c 1,840.15	29,820.71
	Wasatch.....	594.29		2.50	2,848.90	3.00	447.80		3,896.49	3.75	3,892.74
	Total for Utah.....	19,726.64	524.43	183.83	115,068.73	112.34	666.59		136,282.56	3,119.41	133,163.15
Washington.....	Chelan.....	1,740.00		132.30	2,769.57		107.00		4,748.87	10.75	4,738.12
	Columbia.....	3,000.00	9.19		1,537.50		40.00		4,586.69		4,586.69
	Colville.....	252.61		1,311.24	807.55		12.00		2,383.40	236.00	2,147.40
	Kaniks ^a	543.60	52.25	2.17	9.60		40.19		647.81	18.84	628.97
	Olympic.....	4,635.52			25.20		720.00		5,280.72	60.50	5,220.22
	Rainier.....	31.16			4,957.50		24.50		5,013.91	15.00	4,998.91
	Snoqualmie.....	6,250.00	100.00	75.99			814.00		8,219.99	117.50	8,102.49
	Washington.....	16,738.88	443.45	123.74			599.50		17,905.57		17,905.57
	Wenaha ^a	90.04		21.54	3,936.66		19.58		4,067.82		4,067.82
	Wenatchee.....	166.32	1,484.55	274.49	7,110.10	95.00	267.50	2,312.62	11,710.58	36.50	11,674.08
	Total for Washington.....	33,348.13	2,089.44	2,922.22	21,153.68	95.00	2,644.27	2,312.62	64,565.36	495.09	64,070.27
Wyoming.....	Ashley ^a	6.37		.27	29.63		.06		36.33	.02	36.31
	Bighorn.....	32,859.86	5.00		13,712.22		186.00		46,763.08	61.30	46,701.78
	Bonneville.....	2,051.94	15.00		7,147.30		53.00		9,267.24	544.00	8,723.24
	Caribou ^a	4.65		.50	267.43		.20		273.29	.47	272.82
	Cheyenne.....	30,035.64	750.00	132.96	6,271.70		12.00	22.42	37,224.72	190.95	37,033.77
	Hayden ^a	2,447.60	13.25		12,464.98		32.61		14,958.44	130.73	14,827.71
	Shoshone.....	267.81			6,360.75		307.50		6,936.06	612.00	6,324.06
	Sundance.....	44.62		53.85	982.31		7.55		1,088.33	15.25	1,073.08
	Targhee ^a	2,664.27		20.01	4,193.66		33.44		6,911.38	202.00	6,709.38
	Teton.....	281.25			1,472.40		20.00		1,773.65	129.00	1,644.65
	Wyoming.....	845.79		18.00	12,993.32	35.00			13,892.11	250.00	13,642.11
	Total for Wyoming.....	71,509.80	783.25	225.59	65,895.70	35.51	652.36	22.42	139,124.63	2,135.72	136,988.91
	Grand total, gross receipts.....	647,721.06	45,271.63	39,331.35	1,028,468.16	3,717.54	38,982.88	3,778.04	1,807,270.66		
	Refunds.....	^d 28,056.78	1,099.00	1,582.66	9,405.23	25.75	1,012.78			^d 41,182.20	
	Net total.....	619,664.28	44,172.63	37,748.69	1,019,062.93	3,691.79	37,970.10	3,778.04			1,766,088.46

^a Partly in another State. Receipts prorated according to area.

^b Includes \$300.97 to be paid to Uinta Indians.

^c Includes \$782.50 to be paid to Uinta Indians.

^d Including \$1,083.47 returned to Uinta Indians.

The receipts for the fiscal year 1910 are estimated at \$2,500,000.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910.

BUREAU OF CHEMISTRY.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Chemistry, 1909, \$76,720.</i>	<i>Salaries, Bureau of Chemistry, 1910, \$75,560.</i>	<i>Salaries, Bureau of Chemistry, 1911, \$79,360.</i>
Wiley, H. W. Chief of bureau, at \$5,000..... \$5,000.00	1 chemist, who shall be chief of bureau..... \$5,000.00	1 chemist, who shall be chief of bureau..... \$5,000.00
Linton, Fred B. Chief clerk, at \$1,800..... 1,800.00	1 chief clerk..... 1,800.00	1 chief clerk..... 1,800.00
Pierce, A. L. Clerk, class four..... 1,800.00	3 clerks, class four..... 5,400.00	3 clerks, class four..... 5,400.00
Shibley, Jas. G. Clerk, class three..... 1,600.00	3 clerks, class three..... 8,000.00	5 clerks, class three..... 8,000.00
Eckman, Ethel..... 1,600.00	7 clerks, class two..... 9,800.00	5 clerks, class two (increase of 1 by transfer from lump fund)..... 11,200.00
Parkinson, Nellie A. Clerk, class three..... 1,600.00	1 property clerk..... 1,300.00	1 property clerk..... 1,300.00
Pearce, Edw. W. Clerk, class three..... 1,600.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
Walters, Harry H. Clerk, class three..... 1,400.00	9 clerks, class one..... 10,800.00	11 clerks, class one (increase of 2 by transfer from lump fund)..... 13,200.00
Cabell, Syme T. Clerk, class two..... 1,400.00	1 assistant property custodian..... 900.00	9 clerks, at \$1,000 each..... 9,000.00
Dallas, Marie L. Clerk, class two..... 1,376.66	11 clerks, at \$80 each..... 9,000.00	1 assistant property custodian..... 900.00
Grayson, Mary C. Clerk, class two..... 1,400.00	1 engineer..... 1,200.00	11 clerks, at \$900 each..... 9,900.00
Nordeman, Agnes M. Clerk, class two..... 1,400.00	2 messengers, at \$840 each..... 1,680.00	NOTE.—One engineer, at \$1,200, transferred to Secretary's roll.
Olson, Herman E. Clerk, class two..... 1,400.00	1 skilled mechanic..... 900.00	2 messengers, at \$840 each..... 1,680.00
Shipe, Laura F. Property clerk, at \$1,600..... 1,600.00	2 skilled laborers, at \$720 each..... 1,440.00	1 skilled laborer (in lieu of 1 skilled mechanic)..... 900.00
Coleman, Jay G. Clerk, class one..... 1,000.00	1 skilled laborer..... 600.00	2 skilled laborers, at \$720 each..... 1,440.00
Emmons, M. T. Clerk, class one..... 450.00	1 fireman..... 600.00	1 skilled laborer..... 600.00
Kline, Helen M. Clerk, class one..... 470.00	4 messengers or laborers, at \$600 each..... 2,400.00	NOTE.—One fireman, at \$600, transferred to Secretary's roll.
Phillips, Maud..... 260.00	3 messengers or laborers, at \$480 each..... 1,440.00	4 messengers or laborers, at \$480 each (increase of 3 by transfer from lump fund)..... 2,880.00
Pray, Oliver F. Clerk, class one..... 1,200.00	2 messengers or laborers, at \$420 each..... 840.00	2 messengers or laborers, at \$420 each (by transfer from lump fund)..... 360.00
La Grange, Edw. R. Clerk, class one..... 1,200.00	4 charwomen, at \$240 each..... 960.00	4 charwomen, at \$240 each..... 960.00
Lewis, E. B. Clerk, class one..... 1,200.00	Total of above appropriation (an increase over 1909 of \$8,840)..... 75,560.00	Total amount estimated (an increase over 1910 of \$3,800)..... 79,360.00
Lucas, Frederick C. Clerk, class one..... 1,200.00		NOTE.—One clerk of class two, 2 clerks of class one, 3 messengers or laborers, at \$480 each, and 1 messenger or laborer, at \$360, have been added by transfer of these places from the lump fund, aggregating \$5,160, and that appropriation has been reduced accordingly. One engineer, at \$1,200, and 1 fireman, at \$600, amounting to \$1,800, have been transferred to the Secretary's roll. One skilled mechanic, at \$900, has been changed to 1 skilled laborer, at \$900. Net increase, \$3,800.
Moore, Mary D. Clerk, class one..... 1,200.00		
Postle, Stuart A. Clerk, class one..... 1,200.00		
Proctor, Mary F. Clerk, class one..... 1,100.00		
Wood, Myrtle J. Clerk, class one..... 1,200.00		
Anderson, Marjorie F. Clerk, at \$1,000..... 391.67		
Phillips, Maud..... 608.33		
Eckman, Lulu L. Clerk, at \$1,000..... 1,000.00		
Hartman, Mary E. Clerk, at \$1,000..... 1,000.00		
Lambert, Mary A. Clerk, at \$1,000..... 1,000.00		
Pray, Oliver F. Clerk, at \$1,000..... 375.00		
Skinner, L. A. Clerk, at \$1,000..... 625.01		
Schieber, Caroline C. Clerk, at \$1,000..... 1,000.00		
Shuman, Ursula..... 1,000.00		
Walter, Wallace W. Clerk, at \$1,000..... 1,000.00		
Guasp, Ignacio..... 37.50		
Strong, J. Assistant property custodian, at \$900..... 862.50		
Anderson, Marjorie F. Clerk, at \$900..... 347.50		
Durham, Catherine J. Clerk, at \$900..... 352.50		
Cohencions, Sophia F. Clerk, at \$900..... 900.00		
Connell, Lydia..... 900.00		
Davis, Carrie M. Clerk, at \$900..... 900.00		
Evans, John P. Clerk, at \$900..... 412.50		
Jorden, Margaretta M. Clerk, at \$900..... 450.00		
Evans, Samuel W. Clerk, at \$900..... 25.00		
Guasp, Ignacio..... 862.50		
Kemp, Walter D. Clerk, at \$900..... 562.50		
Skinner, L. A. Clerk, at \$900..... 337.50		
Phillips, Cecelia D. Clerk, at \$900..... 900.00		
Warder, Nannie..... 900.00		
Whitall, Mary L. Clerk, at \$900..... 882.50		
Riggles, Thomas. Engineer, at \$1,200..... 1,200.00		
Gantt, J. E. M. Messenger, at \$840..... 695.34		
Johnson, M. A. Messenger, at \$840..... 840.00		
Chick, Thomas. Skilled mechanic, at \$900..... 900.00		
Cohen, Joseph. Skilled laborer, at \$720..... 720.00		
Dahler, August L. Skilled laborer, at \$720..... 720.00		
Dugan, Mary A. Skilled laborer, at \$720..... 720.00		
Brown, Horace. Skilled laborer, at \$600..... 600.00		
Kirksey, William. Fireman, at \$600..... 600.00		
Gerard, Missouri. Messenger or laborer, at \$600..... 600.00		
Lawson, William H. Messenger or laborer, at \$600..... 600.00		
Sherly, Robert E. Messenger or laborer, at \$600..... 600.00		
Brodie, Annie. Messenger or laborer, at \$480..... 280.00		
Brooks, Margaret A. Messenger or laborer, at \$480..... 200.00		
George, Sadie A. Messenger or laborer, at \$480..... 480.00		
Ryon, Lillie. Messenger or laborer, at \$480..... 480.00		
Glidden, David W. Messenger or laborer, at \$420..... 418.83		
Jones, Robert S. Messenger or laborer, at \$420..... 420.00		
Total..... 66,223.34		
Unexpended balance..... 496.66		
Total amount of above appropriation..... 66,720.00		
The above force performed the following duties:	The above force are performing the following duties:	The above force will perform the following duties:
Administrative and executive:	Administrative and executive:	Administrative and executive:
1 chief of bureau..... \$5,000.00	1 chief of bureau..... \$5,000.00	1 chief of bureau..... \$5,000.00
1 chief clerk..... 1,800.00	1 chief clerk..... 1,800.00	1 chief clerk..... 1,800.00
\$6,800.00	\$6,800.00	\$6,800.00
Supplies and accounts:	Supplies and accounts:	Supplies and accounts:
1 property clerk..... 1,600.00	1 clerk, class four..... 1,800.00	1 clerk, class four..... 1,800.00
1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
1 assistant property custodian..... 900.00	1 assistant property custodian..... 900.00	1 assistant property custodian..... 900.00
6,300.00	7,400.00	7,400.00
Interstate and import records:	Interstate and import records:	Interstate and import records:
1 clerk, class three..... 1,600.00	1 clerk, class three..... \$1,600.00	1 clerk, class three..... \$1,600.00
1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
3 clerks, at \$1,000 each..... 3,000.00	3 clerks, class one..... 3,000.00	3 clerks, class one..... 3,000.00
1 clerk..... 900.00	1 clerk..... 900.00	1 clerk..... 900.00
6,900.00	7,500.00	7,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Chemistry, 1909, \$66,720—Continued.</i>		
Library:	Library:	Library:
1 clerk..... \$900.00	1 clerk..... \$1,000.00	1 clerk..... \$1,000.00
Editorial:	Editorial:	Editorial:
1 clerk, class four..... \$1,800.00	1 clerk, class four..... 1,800.00	1 clerk, class four..... \$1,800.00
1 clerk, class one..... 1,200.00		1 clerk, class one..... 1,200.00
3,000.00		3,000.00
Guaranty records:	Guaranty records:	Guaranty records:
1 clerk, class two..... 1,400.00	1 clerk, class three.... \$1,600.00	1 clerk, class three.... 1,600.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
2,600.00	2,800.00	2,800.00
Inspection records:	Inspection records:	Inspection records:
1 clerk, class two..... 1,400.00	1 clerk, class three.... 1,600.00	1 clerk, class three.... 1,600.00
1 clerk..... 1,000.00	1 clerk, class one..... 1,200.00	2 clerks, class one.... 2,400.00
1 clerk..... 900.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
3,300.00	3 clerks, at \$900 each. 2,700.00	3 clerks, at \$900 each. 2,700.00
Filing and indexing correspondence:	Filing and indexing correspondence:	Filing and indexing correspondence:
1 clerk, class three.... 1,600.00	1 clerk, class three.... \$1,600.00	1 clerk, class three.... \$1,600.00
2 clerks, at \$900 each..... 1,800.00	2 clerks, at \$1,000 each 2,000.00	2 clerks, at \$1,000 each. 2,000.00
3,400.00	1 clerk..... 900.00	1 clerk..... 900.00
Stenography and miscellaneous records:	Stenography and miscellaneous records:	Stenography and miscellaneous records:
1 clerk, class three.... 1,600.00	1 clerk, class three.... \$1,600.00	1 clerk, class three.... \$1,600.00
2 clerks, class two..... 2,800.00	5 clerks, class two.... 7,000.00	6 clerks, class two.... 8,400.00
4 clerks, class one..... 4,800.00	1 clerk..... 1,300.00	1 clerk..... 1,300.00
2 clerks, at \$1,000 each..... 2,000.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
5 clerks, at \$900 each..... 4,500.00	4 clerks, at \$1,000 each. 4,000.00	4 clerks, at \$1,000 each. 4,000.00
15,700.00	3 clerks, at \$900 each.. 2,700.00	3 clerks, at \$900 each.. 2,700.00
Records of hearings and pending cases:	Records of hearings and pending cases:	Records of hearings and pending cases:
1 clerk, class four..... 1,800.00	1 clerk, class four.... \$1,800.00	1 clerk, class four.... \$1,800.00
1 clerk, class three.... 1,600.00	1 clerk, class three.... 1,600.00	1 clerk, class three.... 1,600.00
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
2 clerks, at \$1,000 each..... 2,000.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
6,600.00	2 clerks, at \$900 each.. 1,800.00	2 clerks, at \$900 each.. 1,800.00
Engine and machine room:	Engine and machine room:	Engine and machine room:
1 engineer..... 1,200.00	1 engineer..... 1,200.00	This work will be performed by men transferred to the Secretary's roll.
1 fireman..... 600.00	1 skilled mechanic.... 900.00	
1 skilled mechanic..... 900.00	1 skilled laborer..... 720.00	
1 skilled laborer..... 720.00	1 skilled laborer..... 600.00	
1 skilled laborer..... 600.00	1 fireman..... 600.00	
4,020.00	4,020.00	
Messengers and laborers:	Messengers and laborers:	Messengers and laborers:
2 messengers, at \$840 each..... 1,680.00	2 messengers, at \$840 each..... 1,680.00	1 skilled laborer..... 900.00
2 messengers or laborers, at \$720..... 1,440.00	1 messenger..... 720.00	2 messengers, at \$840..... 1,680.00
3 messengers or laborers, at \$600..... 1,800.00	4 messengers, at \$600 each..... 2,400.00	2 messengers or laborers, at \$720..... 1,440.00
3 messengers or laborers, at \$480..... 1,440.00	3 messengers or laborers, at \$480..... 1,440.00	5 messengers or laborers, at \$600..... 3,000.00
2 messengers or laborers, at \$420..... 840.00	2 messengers or laborers, at \$420..... 840.00	6 messengers or laborers, at \$480..... 2,880.00
7,200.00	4 charwomen, at \$240 each..... 960.00	2 messengers or laborers, at \$420..... 840.00
66,720.00	8,040.00	1 messenger or laborer..... 360.00
	75,560.00	4 charwomen, at \$240 each..... 960.00
		12,060.00
		79,360.00
<i>"Laboratory, Department of Agriculture, 1909," \$860,000.</i>		
Lump-fund salaries in Washington..... \$190,636.90	Lump-fund salaries in Washington..... \$240,000.00	Lump-fund salaries in Washington..... \$232,000.00
Lump-fund salaries outside of Washington..... 243,332.71	Lump-fund salaries outside of Washington..... 290,960.00	Lump-fund salaries outside of Washington..... 291,340.00
Stationery..... 7,298.63	Stationery..... 7,000.00	Stationery..... 7,000.00
Miscellaneous supplies and service, equipment, books, machinery, etc..... 51,213.87	Miscellaneous supplies and service, equipment, books, machinery, etc..... 39,600.00	Miscellaneous supplies and service, equipment, books, machinery, etc..... 39,000.00
Furniture..... 9,897.30	Furniture..... 6,000.00	Furniture..... 6,000.00
Freight..... 743.43	Freight..... 2,000.00	Freight..... 2,000.00
Express..... 2,615.57	Express..... 3,000.00	Express..... 3,000.00
Telegraph..... 1,572.61	Telegraph..... 2,000.00	Telegraph..... 2,000.00
Telephone..... 1,661.95	Telephone..... 1,700.00	Telephone..... 2,000.00
Rent..... 22,959.00	Rent..... 37,900.00	Rent..... 33,600.00
Gas and electricity..... 4,331.07	Gas and electricity..... 4,400.00	Gas and electricity..... 2,400.00
Apparatus, instruments, and laboratory material..... 61,297.08	Apparatus, instruments, and laboratory material..... 87,840.00	Apparatus, instruments, and laboratory material..... 88,000.00
Travel and station and field expenses..... 65,978.22	Travel and station and field expenses..... 82,600.00	Travel and station and field expenses..... 83,000.00
Total expenditure under above groups to August 31, 1909, including referee board..... 663,538.34	Total amount of above appropriation (a decrease under 1909 of \$55,000)..... 805,000.00	Total amount estimated (an apparent decrease under 1910 of \$13,660)..... 791,340.00
Repayments to the credit of the appropriation..... 51.38		
Net payments under above groups to August 31, 1909..... 663,486.96		
Outstanding liabilities on August 31, 1909 (estimated)..... 174,591.15		
Balance to be turned back in Treasury (estimated)..... 21,921.89		
Total amount of above appropriation..... 860,000.00		
NOTE.—An appropriation of \$100,000 was added to the regular appropriation of the Bureau of Chemistry during 1909 to make sufficient funds to meet the expenses necessary in connection with equipment of a new building for the use of the bureau. Con-		
NOTE.—In addition to the deductions for salaries from the above appropriation in amounts of \$5,600, transferred to the statutory roll of the Bureau of Chemistry, and \$3,060 transferred to the Secretary's roll, there has been deducted from this appropriation		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Stat., p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.																																																																								
<p>"Laboratory, Department of Agriculture, 1909," \$360,000—Continued.</p> <p>NOTE.—The above expenditures, classified in accordance with the suggestions of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Chemistry. This work fell naturally under the following projects:</p> <p>PROJECTS.</p> <p>(1) Administrative. Office, clerical and editorial.</p> <table><tr><td>Salaries.....</td><td>\$22,535.33</td></tr><tr><td>Traveling expenses.....</td><td>1,679.86</td></tr><tr><td>Supplies.....</td><td>8,001.63</td></tr><tr><td>General expenses.....</td><td>2,862.94</td></tr></table> <p>\$35,079.76</p> <p>(2) Food division. Analyzing imported food samples, checking analyses of branch laboratories; study of the composition of fruit fermentation and preservation of fruit juices; study of new methods of analyses and methods for detection of adulteration in foods; examination of domestic food products which enter interstate commerce in connection with the enforcement of the food and drugs act, and studies of the lemon oil industry.</p> <table><tr><td>Salaries.....</td><td>\$33,821.08</td></tr><tr><td>Traveling expenses.....</td><td>2,569.00</td></tr><tr><td>Supplies.....</td><td>13,229.14</td></tr><tr><td>General expenses.....</td><td>2,701.64</td></tr></table> <p>52,320.86</p> <p>(3) Drug division. Analyzing imported drug samples and checking analyses of branch laboratories; study of methods of drug analyses and methods for detecting adulterations; testing chemical supplies furnished this and other departments by contractors; examining drug products for the Post-Office Department, for study of new problems in drugs and their analyses, and testing domestic drug samples that enter interstate commerce in connection with the enforcement of the food and drugs act.</p> <table><tr><td>Salaries.....</td><td>\$32,146.56</td></tr><tr><td>Traveling expenses.....</td><td>966.38</td></tr><tr><td>Supplies.....</td><td>17,076.75</td></tr><tr><td>General expenses.....</td><td>2,144.94</td></tr></table> <p>52,334.63</p>	Salaries.....	\$22,535.33	Traveling expenses.....	1,679.86	Supplies.....	8,001.63	General expenses.....	2,862.94	Salaries.....	\$33,821.08	Traveling expenses.....	2,569.00	Supplies.....	13,229.14	General expenses.....	2,701.64	Salaries.....	\$32,146.56	Traveling expenses.....	966.38	Supplies.....	17,076.75	General expenses.....	2,144.94	<p>"General expenses, Bureau of Chemistry, 1910," \$305,000—Continued.</p> <p>sidering this fact there is an actual increase of \$45,000 for the bureau's current expenses for 1910 over that appropriated for the same purpose for fiscal year 1909.</p> <p>NOTE.—The above expenditures classified in accordance with the suggestions of the congressional committee on expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Chemistry. The work falls naturally under the following projects:</p> <p>PROJECTS.</p> <p>(1) Administrative. Office, clerical and editorial.</p> <table><tr><td>Salaries.....</td><td>\$20,000.00</td></tr><tr><td>Traveling expenses.....</td><td>2,500.00</td></tr><tr><td>Supplies.....</td><td>8,000.00</td></tr><tr><td>General expenses.....</td><td>2,100.00</td></tr></table> <p>\$32,600.00</p> <p>(2) Food division. For carrying on the previous work; study of new methods of analyses and methods for the detection of adulteration in foods. Both the analytical work and scientific investigations are increased by the extension of the work in connection with the enforcement of the food and drugs act. For investigation of technical methods connected with the manufacture and preparation of foods; investigations of city milk supplies and investigations relative to treatment of oysters, both in connection with the law and other work in connection with the enforcement of the food and drugs act.</p> <table><tr><td>Salaries.....</td><td>\$41,500.00</td></tr><tr><td>Traveling expenses.....</td><td>3,000.00</td></tr><tr><td>Supplies.....</td><td>13,500.00</td></tr><tr><td>General expenses.....</td><td>2,500.00</td></tr></table> <p>60,500.00</p> <p>(3) Drug division. For carrying on previous work and for studying new problems in drugs and their analyses; for the study of synthetic products and preparations containing them; for the study of the preparations of organic compounds and their analyses; for investigating the essential oils; for study of the pharmacological action of drug products under the food and drugs act.</p> <table><tr><td>Salaries.....</td><td>\$37,500.00</td></tr><tr><td>Traveling expenses.....</td><td>3,000.00</td></tr><tr><td>Supplies.....</td><td>13,500.00</td></tr><tr><td>General expenses.....</td><td>2,000.00</td></tr></table> <p>56,000.00</p>	Salaries.....	\$20,000.00	Traveling expenses.....	2,500.00	Supplies.....	8,000.00	General expenses.....	2,100.00	Salaries.....	\$41,500.00	Traveling expenses.....	3,000.00	Supplies.....	13,500.00	General expenses.....	2,500.00	Salaries.....	\$37,500.00	Traveling expenses.....	3,000.00	Supplies.....	13,500.00	General expenses.....	2,000.00	<p>"General expenses, Bureau of Chemistry, 1911," \$791,340—Continued.</p> <p>\$5,000, to be added to the appropriation for contingent expenses of the Department of Agriculture.</p> <p>NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Chemistry. This work will fall naturally under the following projects:</p> <p>PROJECTS.</p> <p>(1) Administrative. Office, clerical and editorial.</p> <table><tr><td>Salaries.....</td><td>\$17,000.00</td></tr><tr><td>Traveling expenses.....</td><td>2,500.00</td></tr><tr><td>Supplies.....</td><td>8,000.00</td></tr><tr><td>General expenses.....</td><td>2,000.00</td></tr></table> <p>\$29,500.00</p> <p>(2) Food division. For carrying on the work previously outlined; studying and preparing new processes for the preservation and preparation of fruits for the market; study of the influence of receptacles on the character and composition of the foods and the study of the relative value of materials used in the preparation of such receptacles. Further studies of the oils, fats, and waxes commonly used with foods; continuation of the investigations upon lemon oil, and also the study of the problems presented by the California by-product work; study of the composition of cider vinegar; methods of analysis and detection of adulterants and other work in connection with the enforcement of the food and drugs act.</p> <table><tr><td>Salaries.....</td><td>\$44,500.00</td></tr><tr><td>Traveling expenses.....</td><td>3,500.00</td></tr><tr><td>Supplies.....</td><td>15,000.00</td></tr><tr><td>General expenses.....</td><td>2,500.00</td></tr></table> <p>65,500.00</p> <p>(3) Drug division. For carrying on work previously outlined; extension and continuation of the investigations of certain drug products imported into the United States, which may be dangerous to the health of the people, such, for instance, as the investigation of products containing habit-forming drugs; special attention being given to the methods of analysis, such as the detection and determination of the various alkalies and other plant constituents in the complex mixtures; continuation of the investigation with regard to the influence of caffeine and caffeine products on metabolism. To the investigation of the poisonous effects of amyl and ethyl alcohol will be added studies with regard to the toxicity of alcohols and aldehydes; studies of new methods of detection of adulteration; investigation of so-called "soft drinks" which contain ingredients that may be deleterious to health; and study of other domestic products containing habit-forming drugs, and other work in connection with the enforcement of the food and drugs act.</p> <table><tr><td>Salaries.....</td><td>\$39,040.00</td></tr><tr><td>Traveling expenses.....</td><td>3,000.00</td></tr><tr><td>Supplies.....</td><td>15,000.00</td></tr><tr><td>General expenses.....</td><td>2,000.00</td></tr></table> <p>59,040.00</p>	Salaries.....	\$17,000.00	Traveling expenses.....	2,500.00	Supplies.....	8,000.00	General expenses.....	2,000.00	Salaries.....	\$44,500.00	Traveling expenses.....	3,500.00	Supplies.....	15,000.00	General expenses.....	2,500.00	Salaries.....	\$39,040.00	Traveling expenses.....	3,000.00	Supplies.....	15,000.00	General expenses.....	2,000.00
Salaries.....	\$22,535.33																																																																									
Traveling expenses.....	1,679.86																																																																									
Supplies.....	8,001.63																																																																									
General expenses.....	2,862.94																																																																									
Salaries.....	\$33,821.08																																																																									
Traveling expenses.....	2,569.00																																																																									
Supplies.....	13,229.14																																																																									
General expenses.....	2,701.64																																																																									
Salaries.....	\$32,146.56																																																																									
Traveling expenses.....	966.38																																																																									
Supplies.....	17,076.75																																																																									
General expenses.....	2,144.94																																																																									
Salaries.....	\$20,000.00																																																																									
Traveling expenses.....	2,500.00																																																																									
Supplies.....	8,000.00																																																																									
General expenses.....	2,100.00																																																																									
Salaries.....	\$41,500.00																																																																									
Traveling expenses.....	3,000.00																																																																									
Supplies.....	13,500.00																																																																									
General expenses.....	2,500.00																																																																									
Salaries.....	\$37,500.00																																																																									
Traveling expenses.....	3,000.00																																																																									
Supplies.....	13,500.00																																																																									
General expenses.....	2,000.00																																																																									
Salaries.....	\$17,000.00																																																																									
Traveling expenses.....	2,500.00																																																																									
Supplies.....	8,000.00																																																																									
General expenses.....	2,000.00																																																																									
Salaries.....	\$44,500.00																																																																									
Traveling expenses.....	3,500.00																																																																									
Supplies.....	15,000.00																																																																									
General expenses.....	2,500.00																																																																									
Salaries.....	\$39,040.00																																																																									
Traveling expenses.....	3,000.00																																																																									
Supplies.....	15,000.00																																																																									
General expenses.....	2,000.00																																																																									

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
"Laboratory, Department of Agriculture, 1909," \$860,000—Continued.	"General expenses, Bureau of Chemistry, 1910," \$805,000—Continued.	"General expenses, Bureau of Chemistry, 1911," \$791,340—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Branch food and drug inspection laboratories. Examining samples of imported food and drug products and samples of food and drug products which enter interstate commerce, for conducting hearings and other work in connection with the enforcement of the food and drugs act.	(4) Branch food and drug inspection laboratories. For analyses of samples; for conducting hearings and other work in connection with the enforcement of the food and drugs act.	(4) Branch food and drug inspection laboratories. For continuing examinations of food and drug products in connection with the enforcement of the food and drugs act; for conducting hearings and other work in connection with the enforcement of the law.
New York laboratory:	New York laboratory:	New York laboratory:
Salaries..... \$32,933.24	Salaries..... \$35,000.00	Salaries..... \$36,000.00
Traveling expenses..... 467.39	Traveling expenses..... 700.00	Traveling expenses..... 700.00
Supplies..... 9,565.27	Supplies..... 9,600.00	Supplies..... 10,000.00
General expenses..... 267.08	General expenses..... 500.00	General expenses..... 500.00
\$43,232.98	\$45,800.00	\$47,200.00
Chicago laboratory:	Chicago laboratory:	Chicago laboratory:
Salaries..... 15,521.09	Salaries..... 16,000.00	Salaries..... 18,000.00
Traveling expenses..... 218.70	Traveling expenses..... 600.00	Traveling expenses..... 600.00
Supplies..... 4,029.91	Supplies..... 4,500.00	Supplies..... 4,900.00
Rent..... 2,700.00	Rent..... 2,700.00	Rent..... 2,700.00
General expenses..... 444.22	General expenses..... 500.00	General expenses..... 500.00
22,913.92	24,300.00	26,700.00
Boston laboratory:	Boston laboratory:	Boston laboratory:
Salaries..... 8,502.00	Salaries..... 9,000.00	Salaries..... 10,000.00
Traveling expenses..... 370.51	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 2,240.04	Supplies..... 3,500.00	Supplies..... 3,000.00
General expenses..... 285.67	General expenses..... 300.00	General expenses..... 300.00
11,398.22	13,300.00	13,800.00
San Francisco laboratory:	San Francisco laboratory:	San Francisco laboratory:
Salaries..... 6,240.00	Salaries..... 7,000.00	Salaries..... 8,000.00
Traveling expenses..... 104.70	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 2,556.97	Supplies..... 2,500.00	Supplies..... 2,800.00
General expenses..... 285.67	General expenses..... 300.00	General expenses..... 300.00
9,187.34	10,300.00	11,600.00
New Orleans laboratory:	New Orleans laboratory:	New Orleans laboratory:
Salaries..... 4,280.00	Salaries..... 5,700.00	Salaries..... 6,700.00
Traveling expenses..... 67.05	Traveling expenses..... 300.00	Traveling expenses..... 300.00
Supplies..... 1,153.27	Supplies..... 1,400.00	Supplies..... 1,600.00
General expenses..... 260.67	General expenses..... 300.00	General expenses..... 300.00
5,760.99	7,700.00	8,900.00
Philadelphia laboratory:	Philadelphia laboratory:	Philadelphia laboratory:
Salaries..... 5,410.00	Salaries..... 6,500.00	Salaries..... 7,500.00
Traveling expenses..... 32.70	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 982.65	Supplies..... 1,500.00	Supplies..... 2,000.00
General expenses..... 285.67	General expenses..... 300.00	General expenses..... 300.00
6,711.02	8,800.00	10,300.00
St. Paul laboratory:	St. Paul laboratory:	St. Paul laboratory:
Salaries..... 6,237.50	Salaries..... 7,500.00	Salaries..... 8,500.00
Traveling expenses..... 409.53	Traveling expenses..... 600.00	Traveling expenses..... 600.00
Supplies..... 1,131.38	Supplies..... 1,200.00	Supplies..... 2,000.00
General expenses..... 276.60	General expenses..... 300.00	General expenses..... 300.00
8,055.01	9,600.00	11,400.00
Kansas City laboratory:	Kansas City laboratory:	Kansas City laboratory:
Salaries..... 3,919.17	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 162.57	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 1,430.19	Supplies..... 1,600.00	Supplies..... 1,800.00
General expenses..... 362.15	General expenses..... 300.00	General expenses..... 300.00
5,874.08	8,400.00	9,600.00
Galveston laboratory:	Galveston laboratory:	Galveston laboratory:
Salaries..... 3,446.67	Salaries..... 5,900.00	Salaries..... 6,900.00
Traveling expenses..... 299.55	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 1,995.56	Supplies..... 1,900.00	Supplies..... 2,000.00
General expenses..... 201.17	General expenses..... 200.00	General expenses..... 200.00
5,942.95	8,500.00	9,600.00
Portland laboratory:	Portland laboratory:	Portland laboratory:
Salaries..... 3,788.33	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 1,108.02	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 1,200.00	Supplies..... 1,700.00	Supplies..... 2,000.00
Rent..... 1,200.00	Rent..... 1,200.00	Rent..... 1,200.00
General expenses..... 285.00	General expenses..... 240.00	General expenses..... 300.00
6,441.35	9,600.00	11,000.00
Buffalo laboratory:	Buffalo laboratory:	Buffalo laboratory:
Salaries..... 4,670.00	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 84.93	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 2,030.18	Supplies..... 2,100.00	Supplies..... 2,200.00
General expenses..... 285.67	General expenses..... 300.00	General expenses..... 300.00
7,130.78	8,800.00	10,000.00
Denver laboratory:	Denver laboratory:	Denver laboratory:
Salaries..... 6,211.67	Salaries..... 6,500.00	Salaries..... 7,500.00
Traveling expenses..... 226.00	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 1,855.43	Supplies..... 2,000.00	Supplies..... 2,100.00
Rent..... 1,200.00	Rent..... 1,200.00	Rent..... 1,200.00
General expenses..... 285.67	General expenses..... 300.00	General expenses..... 300.00
9,778.77	10,400.00	11,600.00
Seattle laboratory:	Seattle laboratory:	Seattle laboratory:
Salaries..... 4,283.15	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 255.83	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 2,039.57	Supplies..... 1,700.00	Supplies..... 2,000.00
Rent..... 1,500.00	Rent..... 1,500.00	Rent..... 1,500.00
General expenses..... 286.47	General expenses..... 200.00	General expenses..... 300.00
8,365.02	9,800.00	11,300.00

146 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>"Laboratory, Department of Agriculture, 1909," \$360,000—Continued.</i>	<i>"General expenses, Bureau of Chemistry, 1910," \$305,000—Continued.</i>	<i>"General expenses, Bureau of Chemistry, 1911," \$791,340—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detroit laboratory:	Detroit laboratory:	Detroit laboratory:
Salaries..... \$3,943.33	Salaries..... \$6,000.00	Salaries..... \$7,000.00
Traveling expenses..... 64.55	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 1,625.79	Supplies..... 1,400.00	Supplies..... 1,800.00
Rent..... 850.00	Rent..... 850.00	Rent..... 850.00
General expenses..... 210.60	General expenses..... 200.00	General expenses..... 300.00
	\$8,850.00	\$10,450.00
Cincinnati laboratory:	Cincinnati laboratory:	Cincinnati laboratory:
Salaries..... 3,980.00	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 448.34	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 2,736.28	Supplies..... 1,700.00	Supplies..... 1,800.00
Rent..... 1,500.00	Rent..... 1,500.00	Rent..... 1,500.00
General expenses..... 354.57	General expenses..... 200.00	General expenses..... 300.00
	9,900.00	11,100.00
Savannah laboratory:	Savannah laboratory:	Savannah laboratory:
Salaries..... 4,436.67	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 91.60	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 1,850.28	Supplies..... 1,600.00	Supplies..... 1,800.00
General expenses..... 199.00	General expenses..... 200.00	General expenses..... 200.00
	8,200.00	9,500.00
Honolulu laboratory:	Honolulu laboratory:	Honolulu laboratory:
Salaries..... 1,907.67	Salaries..... 3,000.00	Salaries..... 3,500.00
Traveling expenses.....	Traveling expenses..... 200.00	Traveling expenses..... 200.00
Supplies..... 1,632.45	Supplies..... 1,400.00	Supplies..... 1,600.00
Rent..... 300.00	Rent..... 300.00	Rent..... 300.00
General expenses..... 161.67	General expenses..... 200.00	General expenses..... 200.00
	5,100.00	5,800.00
Omaha laboratory:	Omaha laboratory:	Omaha laboratory:
Salaries..... 3,172.49	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 364.25	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 4,435.47	Supplies..... 3,000.00	Supplies..... 3,000.00
General expenses..... 300.67	General expenses..... 300.00	General expenses..... 300.00
	9,700.00	10,800.00
St. Louis laboratory:	St. Louis laboratory:	St. Louis laboratory:
Salaries..... 1,824.17	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 462.98	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 2,297.84	Supplies..... 1,800.00	Supplies..... 1,800.00
Rent..... 1,296.00	Rent..... 1,296.00	Rent..... 1,296.00
General expenses..... 239.00	General expenses..... 254.00	General expenses..... 304.00
	9,750.00	10,900.00
Pittsburg laboratory:	Pittsburg laboratory:	Pittsburg laboratory:
Salaries..... 3,245.00	Salaries..... 6,000.00	Salaries..... 7,000.00
Traveling expenses..... 84.90	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 2,639.96	Supplies..... 2,000.00	Supplies..... 2,100.00
Rent..... 1,580.00	Rent..... 1,580.00	Rent..... 1,580.00
General expenses..... 247.36	General expenses..... 270.00	General expenses..... 320.00
	10,250.00	11,500.00
Nashville laboratory:	Nashville laboratory:	Nashville laboratory:
Salaries..... 133.33	Salaries..... 5,000.00	Salaries..... 6,000.00
Traveling expenses..... 212.25	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 1,333.11	Supplies..... 1,500.00	Supplies..... 1,800.00
General expenses..... 61.66	General expenses..... 200.00	General expenses..... 200.00
	7,100.00	8,500.00
Total for branch laboratories..... 201,045.67	Total for branch laboratories..... 244,150.00	Total for branch laboratories..... 271,610.00
The Nashville laboratory was not finally completed until about June 1, 1909.		
(5) Inspection work. For inspection work, collecting samples, inspecting food plants, in connection with the enforcement of the food and drugs act, gathering evidence of interstate shipments, investigating complaints, conducting special investigations, etc.	(5) Inspection work. For inspection work, collecting samples, inspecting plants, gathering evidence of interstate shipments, investigating complaints, etc.	(5) Inspection work. For inspection work, collecting samples and inspecting plants, gathering evidence of interstate shipments, investigating complaints, etc., and other work in connection with the enforcement of the food and drugs act.
Salaries..... \$62,704.64	Salaries..... \$66,000.00	Salaries..... \$68,000.00
Traveling expenses..... 50,048.21	Traveling expenses..... 55,000.00	Traveling expenses..... 58,000.00
Supplies..... 2,256.27	Supplies..... 2,000.00	Supplies..... 2,200.00
General expenses..... 2,091.00	General expenses..... 2,000.00	General expenses..... 2,000.00
	125,000.00	130,200.00
(6) Miscellaneous division. Study of mineral waters and examination of samples under the food and drugs act; examination of town water supplies; study of insecticides and fungicides, and field studies of lead arsenate on foliage; study of relative feeding values and commercial importance of grains; study of methods of analyses of cattle foods; study of the effects of trade waste on vegetation, and examination of miscellaneous samples for this bureau and for other departments as requested. The work on mineral waters and cattle foods in connection with the enforcement of the food and drugs act has by that act been greatly increased. The insecticides and fungicides investigations are increasing rapidly, as also the study of the effects of trade waste on vegetation.	(6) Miscellaneous division. For carrying on previous work and investigations, particularly the study of insecticides and fungicides, and the effect of trade waste on forests, farm crops, and animals, and to provide methods for preventing or mitigating such injuries. The examination and study of waters and cattle foods in connection with the enforcement of the food and drugs act is rapidly increasing the work of this division.	(6) Miscellaneous division. For carrying on work previously outlined; the examination of bottled mineral and table waters and the composition of cattle and poultry foods, and remedies as they appear on the market; the study of range forage crops; the milling and baking quality of cereals and other products, and the effect of bleaching on flour; studies of new methods of analysis; the effect of toxic gases on different species of plants, also resistance of certain plants to copper, arsenic, etc., and to make an examination of the method of manufacture and practical value of disinfectants. The study of range forage crops in collaboration with Bureau of Plant Industry.

EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE. 147

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (§4 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
"Laboratory, Department of Agriculture, 1909," \$860,000—Continued.	"General expenses, Bureau of Chemistry, 1910," \$803,000—Continued.	"General expenses, Bureau of Chemistry, 1911," \$791,340—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Salaries..... \$23,752.49	Salaries..... \$27,000.00	Salaries..... \$28,000.00
Traveling expenses..... 1,469.17	Traveling expenses... 1,000.00	Traveling expenses.. 1,400.00
Supplies..... 8,344.83	Supplies..... 6,000.00	Supplies..... 6,500.00
General expenses..... 1,631.67	General expenses.... 1,500.00	General expenses.... 1,500.00
\$35,198.16	\$35,500.00	\$37,400.00
(7) Dairy laboratory. Analysis of dairy products for Bureau of Animal Industry of this department; for this bureau and for other departments as requested; analysis of dairy products in connection with the enforcement of the food and drugs act; study of composition of market dairy products and for study of methods of analysis of dairy products. The work of this laboratory has been greatly increased by work in connection with the enforcement of the food and drugs act. The investigation of the manufacture and preparation of condensed milks and other work in connection with the enforcement of the food and drugs act, as relating to dairy products.	(7) Dairy laboratory. For analytical work and investigations of dairy products, as previously outlined.	(7) Dairy laboratory. Continuation and extension of work previously outlined; work on analytical methods and the checking of analyses received from branch laboratories, for samples analyzed in connection with the enforcement of the food and drugs act.
Salaries..... \$7,085.84	Salaries..... \$9,000.00	Salaries..... \$10,000.00
Traveling expenses..... 287.25	Traveling expenses... 500.00	Traveling expenses.. 500.00
Supplies..... 2,792.55	Supplies..... 2,500.00	Supplies..... 2,700.00
General expenses..... 881.23	General expenses.... 600.00	General expenses.... 600.00
11,046.87	12,600.00	13,800.00
(8) Leather and paper laboratory. Study of tanning materials, with reference to the utilization of such products as grow quickly or which have hitherto been little used with a view of supplementing the rapidly decreasing supply; for the study of the physical and chemical qualities of leather, and of the principles of rapid tanning; for studying and testing papers, ropes, etc., for various uses and for the preparation of standard specifications for such items; for investigation of new raw materials for pulp and paper making; for the investigation of the production and industrial application of wood turpentine and the study of the destructive distillation of woods; for testing papers, twine, etc., supplied by contractors to the Government Printing Office, Post-Office Department, and other departments, as requested.	(8) Leather and paper laboratory. For carrying on work and investigations as outlined previously; chemical-technical problems relative to the production and utilization and composition of turpentine rosins and other rosins and gums; examinations of turpentine and rosin under the food and drugs act; technical and chemical investigations of the destructive distillation of woods, with reference to the utilization of waste, and the increase of the various products obtained therefrom. Also investigations of other chemical uses of woods.	(8) Leather and paper laboratory. For continuation of work previously outlined; testing of paper, leather, and turpentine for other departments, which require such tests, will be continued with special reference to the qualities that determine value in service. Work on the quality of papers and investigations of new paper-making materials and paper-making processes will be made. Under the food and drugs act turpentine will be examined, and the proper methods of differentiating commercial turpentine will be studied.
Salaries..... \$10,048.34	Salaries..... \$12,500.00	Salaries..... \$13,500.00
Traveling expenses..... 515.53	Traveling expenses.. 400.00	Traveling expenses.. 500.00
Supplies..... 3,667.11	Supplies..... 3,500.00	Supplies..... 3,600.00
General expenses..... 912.67	General expenses.... 600.00	General expenses.... 600.00
15,143.65	17,000.00	18,200.00
(9) Sugar laboratory. Examination of sugar, sirup, and honey samples in connection with the food and drugs act; study of various raw materials for use in alcohol production; examination of samples in study of effects of the environment on sweet Indian corn; examinations of samples of sugar beets and study of methods of analyses of sugar products; for studying the effects of environment and process of manufacture upon composition of beet molasses; for study of chemical methods employed in the analysis of sugars and carbohydrates. Examination of samples of sugars, sirups, etc., in connection with the enforcement of the food and drugs act has greatly increased this work.	(9) Sugar laboratory. Continuing previous work and investigations of sugar products, special attention having been paid to maple sirup and sugar industry; much attention is being paid to the collection of the sap and its treatment; studying the effect of these factors on appearance and composition of the finished product.	(9) Sugar laboratory. Continuation of work previously outlined; investigation of the sorghum molasses and sirup industry, including the work on maple sugar and imported honey; study of new methods of analysis in regard to beet and cane sugar manufacturing industries; studies of the methods of analysis of sugar-containing foodstuffs.
Salaries..... \$4,320.00	Salaries..... \$6,000.00	Salaries..... \$7,000.00
Traveling expenses..... 318.35	Traveling expenses.. 500.00	Traveling expenses.. 500.00
Supplies..... 2,595.81	Supplies..... 2,000.00	Supplies..... 2,500.00
General expenses..... 629.50	General expenses.... 600.00	General expenses.... 600.00
7,863.66	9,100.00	10,600.00
(10) Contracts laboratory. Test and examination of contract supplies furnished by contractors to this and other departments of the Government; study of methods of testing supplies and the preparation of specifications for contract supplies.	(10) Contracts laboratory. Continuing work as outlined before. The work of testing supplies for other departments has grown in volume and importance, a great variety of supplies being tested, including the examination of supplies furnished the Isthmian Canal Commission, and other departments of the Government.	(10) Contracts laboratory. Continuation and extension of work previously outlined; study of new methods of analysis; making study of the inflammability of denatured alcohol, and the methods for the storage of the same; the examination of linseed oil and service tests of paints, and paint materials; and other work of testing supplies that may be requested from time to time by this and other departments and branches of the Government.
Salaries..... \$15,573.95	Salaries..... \$18,500.00	Salaries..... \$19,500.00
Traveling expenses..... 317.40	Traveling expenses.. 400.00	Traveling expenses.. 400.00
Supplies..... 7,880.80	Supplies..... 7,000.00	Supplies..... 7,000.00
General expenses..... 719.33	General expenses.... 700.00	General expenses.... 700.00
23,991.48	26,600.00	27,600.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
"Laboratory, Department of Agriculture, 1909," \$860,000—Continued.	"General expenses, Bureau of Chemistry, 1910," \$805,000—Continued.	"General expenses, Bureau of Chemistry, 1911," \$791,340—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(11) Microchemical laboratory. Microscopical examinations of samples for the other laboratories of the bureau, particularly samples being analyzed in connection with the enforcement of the food and drugs act; study of methods, and examination of samples for other bureaus.	(11) Microchemical laboratory. For continuation of previous work; special attention is being given to histological study of fruits, spices, cereals, and other agricultural products, for the purpose of perfecting methods for detecting adulteration of these products.	(11) Microchemical laboratory. Continuation and extension of work previously outlined; study of new methods of detecting adulteration, and other microscopical work, as requested from time to time by this and other departments of the Government.
Salaries..... \$6,615.33	Salaries..... \$9,000.00	Salaries..... \$10,000.00
Traveling expenses..... 111.65	Traveling expenses..... 500.00	Traveling expenses..... 500.00
Supplies..... 1,049.26	Supplies..... 1,000.00	Supplies..... 1,300.00
General expenses..... 620.17	General expenses..... 600.00	General expenses..... 600.00
\$8,396.91	\$11,100.00	\$12,400.00
(12) Bacteriological investigations. Bacteriological examination of samples and for studying the wholesomeness and sanitary condition of foods; for investigating in collaboration with the drug division of this bureau the sterility of various dressings, bandages, pads, ligatures, gauzes, etc., used in surgery; for bacteriological examinations of all samples for other laboratories requiring such, particularly of waters, milk, cream, and other food products entering into interstate commerce; study of methods of examination; study of organisms found in condensed milk and evaporated milk, and other bacteriological investigations in connection with the enforcement of the food and drugs act.	(12) Bacteriological investigations. Continuation and extension of previous work. Special attention during the present year is being given to bacteriological examination of oyster and milk supplies, under the food and drugs act.	(12) Bacteriological investigations. Continuation and extension of work previously outlined; testing germicidal antiseptic and preservative drugs and chemicals, and fruit juices; study of the identification and classification of the various bacteria, yeast and molds; and other bacteriological work, in connection with the enforcement of the food and drugs act.
Salaries..... \$5,332.61	Salaries..... \$7,500.00	Salaries..... \$8,500.00
Traveling expenses..... 472.41	Traveling expenses..... 600.00	Traveling expenses..... 700.00
Supplies..... 2,583.93	Supplies..... 2,500.00	Supplies..... 2,600.00
General expenses..... 743.50	General expenses..... 600.00	General expenses..... 600.00
9,132.45	11,200.00	12,400.00
(13) Animal physiological chemistry. Studies of the methods of analyses employed in physiological work; digestion experiments on lower animals, including metabolism and feeding experiments on lower animals, using in the former organic and inorganic forms of phosphorus and sulphur, and in the latter various prepared foods and different carbohydrates, to determine their nutritive value. Studies of enzymes and their application to chemical and physiological methods of analysis; the examination and analysis of samples of foods and other work in connection with the enforcement of the food and drugs act.	(13) Animal physiological chemistry. Continuation and extension of work previously outlined; studying new methods of analysis and other work in connection with the enforcement of the food and drugs act.	(13) Animal physiological chemistry. Continuation of metabolism experiments and related food work; study of enzymes, especially their reaction to ordinary and special analytical methods; analyses of samples and other work in connection with the enforcement of the food and drugs act.
Salaries..... \$8,671.67	Salaries..... \$11,300.00	Salaries..... \$12,300.00
Traveling expenses..... 58.74	Traveling expenses..... 400.00	Traveling expenses..... 500.00
Supplies..... 2,169.20	Supplies..... 2,150.00	Supplies..... 2,500.00
General expenses..... 823.50	General expenses..... 600.00	General expenses..... 600.00
11,723.11	14,450.00	15,900.00
(14) Vegetable physiological chemistry. In collaboration with Bureau of Plant Industry; study of the improvement of cereals grown in this country; effect of variation of climate on newly introduced varieties of grain; chemical changes in composition of cereals when grown in different localities, and at different stages of growth; study of the influence of excessive changes in cereals after grinding, when allowed to age; study of methods of analyses of cereals; study of the influence of fertilizers, especially phosphate salts, on the gluten content of wheat; study of the influence of preceding legume crops on the gluten content of wheat; study of barley and malts; for the continuation and completion of the work previously done in the plant-analysis laboratory.	(14) Vegetable physiological chemistry. For continuing and extending the lines of work previously outlined, in collaboration with the various divisions of the Bureau of Plant Industry; for the study of the chemical and physiological changes taking place in barley during fermentation, and changes in the composition of cereals during storage, and methods of analysis relating to such work. The composition of cereals, cereal products grown under different conditions of environment; investigations of wheat, milling and the bleaching of flour and other investigations of like nature, in connection with the enforcement of the food and drugs act.	(14) Vegetable physiological chemistry. Continuation of unfinished work previously outlined; study of the influence of climate, soil, etc., on composition, character and value of farm products; investigation of the baking value of flours will be undertaken in collaboration with other laboratories of the bureau. This will include not only study of the flour, but of the quality of the yeast; the study of the food value of the high-phosphorus-containing portion of wheat. Study of the influence of climate, soil, etc., on composition, character, and value of farm products, in collaboration with the Bureau of Plant Industry.
Salaries..... \$12,670.00	Salaries..... \$15,500.00	Salaries..... \$15,500.00
Traveling expenses..... 320.00	Traveling expenses..... 300.00	Traveling expenses..... 400.00
Supplies..... 2,232.30	Supplies..... 2,200.00	Supplies..... 2,600.00
General expenses..... 887.74	General expenses..... 600.00	General expenses..... 600.00
16,110.04	18,600.00	19,100.00
(15) Food-research work. Investigations relative to handling, shipping, and preservation of poultry, eggs, fish, game, and other foods, with special reference to putridity and decomposition of these products, in connection with the determination of their fitness or unfitness for interstate commerce, under the food and drugs act, and to perform inspection work, food-research work, study of methods of analysis and other work in connection with the enforcement of the food and drugs act.	(15) Food-research work. Continuation and extension of work previously outlined; experiments to indicate the effect on the keeping quality of fowls, after the various methods of handling, and other work in connection with the enforcement of the food and drugs act.	(15) Food-research work. Continuation of work previously outlined; the study of industrial problems relating to the handling of poultry and eggs by investigations conducted in the packing houses, and during transportation, as well as in the warehouse, and other stages of storage, handling and transportation of these products. Bacteriological, chemical, and histological investigations in the laboratory are coincident with work in the field.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Chemistry—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
"Laboratory, Department of Agriculture, 1909," \$880,000—Continued.	"General expenses, Bureau of Chemistry, 1910," \$805,000—Continued.	"General expenses, Bureau of Chemistry, 1911," \$791,840—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Salaries..... \$10,663.40	Salaries..... \$15,000.00	Salaries..... \$16,000.00
Traveling expenses..... 1,351.91	Traveling expenses.. 2,500.00	Traveling expenses.. 2,500.00
Supplies..... 4,040.45	Supplies..... 4,500.00	Supplies..... 4,900.00
Rent..... 1,860.00	Rent..... 2,160.00	Rent..... 2,160.00
General expenses..... 429.67	General expenses..... 440.00	General expenses.... 440.00
\$18,345.43	\$24,600.00	\$26,000.00
(16) Enological investigations. Study of cultures of pure yeast in relation to the fermentation of fruit juices and the dissemination of these cultures to persons in the manufacture of fruit by-products.	(16) Enological investigations. Continuation and extension of previous work; special attention being given to the preparation, fermentation, and bottling of wines, fruit juices, etc., in connection with the enforcement of the law.	(16) Enological investigations. Continuation and extension of work previously outlined: collection, test, and chemical examination of native wines of the Lake Erie district, the entire northern grape belt of Ohio, Pennsylvania, and New York; the preparation of native wines from pure must of the grapes; a similar line of study and chemical examination of apples as grown in the northern fruit belt of the United States, and the by-products therefrom; study of pure yeast, experiments on the technic of wine making, including investigation of the fundamental questions of fermenting, aging, and preserving of wines. A large portion of the information and data to be obtained is to meet the demands made by questions arising in connection with the enforcement of the food and drugs act.
Salaries..... \$4,397.78	Salaries..... \$9,000.00	Salaries..... \$10,000.00
Traveling expenses..... 378.57	Traveling expenses... 1,700.00	Traveling expenses.. 1,500.00
Supplies..... 3,416.63	Supplies..... 4,500.00	Supplies..... 4,500.00
General expenses..... 244.00	Rent..... 600.00	Rent..... 900.00
8,436.98	General expenses.... 200.00	General expenses.... 200.00
	16,000.00	17,100.00
(17) Equipment of new building:	(17) Special investigations:	(17) Special investigations:
Supplies and equipment..... 133,608.17	For examination for nitrogen of all samples requiring such tests. This work is greatly increased because of the increase of samples under the food and drugs act, \$6,000.	For examination for nitrogen of samples requiring such tests, \$6,090.
(18) Special investigations:	Studies of the effect of environment on sweet Indian corn, \$5,500.	Collaboration with state officials in connection with the enforcement of the food and drugs act, \$6,000.
Nitrogen tests and investigations. For examination for nitrogen of all samples requiring such tests. This work has been greatly increased by increase of samples under the food and drugs act, \$5,824.79.	Collaboration with state officials in connection with the enforcement of the food and drugs act, \$6,000.	Special chemical investigations. For special chemical investigations conducted for or in collaboration with other departments; for special investigations necessary under the food and drugs act; for the employment of special agents and others in connection with the enforcement of the food and drugs act, \$12,900.
Studies of effect of environment on sweet Indian corn, \$5,448.51.	Denatured alcohol experiments and investigations. To demonstrate and illustrate the methods for the making of denatured alcohol on a scale suitable for utilization by the farmer, or associations of farmers, \$12,500.	
Collaboration with state officials in connection with the enforcement of the food and drugs act, \$2,355.32.		
Denatured alcohol experiments and investigations. To demonstrate and illustrate the methods for the making of denatured alcohol on a scale suitable for utilization by the farmer, or associations of farmers, \$22,571.54.		
Salaries..... \$14,617.31	Salaries..... \$18,560.00	Salaries..... \$14,900.00
Traveling expenses..... 4,068.14	Traveling expenses.. 4,000.00	Traveling expenses.. 4,000.00
Supplies..... 15,794.87	Supplies..... 6,500.00	Supplies..... 5,290.00
General expenses..... 1,719.84	General expenses.... 1,940.00	General expenses.... 800.00
36,200.16	30,000.00	24,990.00
Referee board of scientific experts, to the Secretary of Agriculture:	Referee board of scientific experts, to the Secretary of Agriculture:	
Salaries..... \$30,927.30	Salaries..... \$40,000.00	
Traveling expenses..... 834.44	Traveling expenses.. 4,000.00	
Supplies..... 12,773.46	Supplies..... 15,500.00	
General expenses..... 464.80	General expenses.... 500.00	
45,000.00	60,000.00	
Total payments for the entire Bureau of Chemistry to August 31, 1909..... 729,761.68	Total of all appropriations for Bureau of Chemistry (a decrease under 1909 of \$46,160)..... \$80,560.00	Total amount estimated for the entire Bureau of Chemistry (a decrease under 1910 of \$9,860)..... \$70,700.00
Repayments to credit of appropriation..... 51.38		
Total expenditures to August 31, 1909..... 729,710.30		
Outstanding liabilities to August 31, 1909 (estimated)..... 174,591.15		
Balance to be turned back in Treasury (estimated)..... 22,418.55		
Total of all appropriations for the Bureau of Chemistry..... 926,720.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

BUREAU OF SOILS.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Soils, 1909, \$34,700.</i>	<i>Salaries, Bureau of Soils, 1910, \$35,500.</i>	<i>Salaries, Bureau of Soils, 1911, \$37,420.</i>
Whitney, Milton..... Chief of bureau, at \$3,500..... \$3,500.00 Rice, A. G..... Chief clerk, at \$2,000..... 2,000.00 Drake, Chas. A..... Clerk, class four..... 1,800.00 Seaton, Charles H..... Clerk, class four..... 1,800.00 Wolfe, C. A..... Clerk, class three..... 1,600.00 Clevenger, O. B..... Clerk, class two..... 938.34 Newton, V. B..... Clerk, class two..... 431.66 King, G. B..... Clerk, class two..... 1,400.00 Patterson, M. W..... Clerk, class two..... 1,400.00 Clevenger, O. B..... Clerk, class one..... 370.00 Kemper, J. M., jr..... Clerk, class one..... 830.00 Connolly, A. L..... Clerk, class one..... 50.01 Dickson, E. J..... Clerk, class one..... 1,150.00 Cummings, R. F..... Clerk, class one..... 1,200.00 Flavin, P. T..... Clerk, class one..... 1,200.00 McKercher, J. W..... Clerk, class one..... 1,200.00 Stewart, Janette..... Clerk, class one..... 1,136.67 Wieser, L..... Draftsman, at \$1,200..... 1,173.33 Briscoe, A. J..... Draftsman, at \$1,000..... 1,000.00 Ash, Geo. T..... Clerk, at \$1,000..... 1,000.00 Dickson, E. J..... Clerk, at \$1,000..... 41.67 Hutchins, W. A..... Clerk, at \$1,000..... 927.78 Hodge, Frederic E..... Clerk, at \$1,000..... 1,000.00 Kemper, J. M., jr..... Clerk, at \$1,000..... 308.33 Sturgis, Arthur G..... Clerk, at \$840..... 840.00 Haygood, Serena..... Clerk, at \$840..... 816.65 Howe, Sarah W..... Clerk, at \$840..... 763.00 Prevare, John F..... Carpenter, at \$840..... 630.00 Blair, S. C..... Photographer, at \$1,000..... 1,000.00 Bonde, R. J..... Messenger, at \$720..... 720.00 Bresnahan, M..... Laborer, at \$480..... 450.00 King, Chas. W..... Charwoman, at \$480..... 450.00 Brown, M. L..... Messenger boy, at \$360..... 309.00 Mahan, T. F..... 51.00 Masi, J. W.....	1 soil physicist, who shall be chief of bureau..... \$3,500.00 1 chief clerk..... 2,000.00 2 clerks, class four..... 3,600.00 1 clerk, class three..... 1,600.00 3 clerks, class two..... 4,200.00 6 clerks, class one..... 7,200.00 1 draftsman..... 1,200.00 1 draftsman..... 1,000.00 4 clerks, at \$1,000 each..... 4,000.00 3 clerks, at \$840 each..... 2,520.00 1 carpenter..... 840.00 1 photographer..... 1,200.00 1 messenger..... 720.00 1 messenger or laborer..... 450.00 1 laborer..... 600.00 1 charwoman or laborer..... 450.00 1 messenger boy..... 360.00 Total amount of above appropriation (an increase over 1909 of \$800)..... <u>\$35,500.00</u>	1 soil physicist, who shall be chief of bureau..... \$3,500.00 1 chief clerk..... 2,000.00 2 clerks, class four..... 3,600.00 1 clerk, class three..... 1,600.00 3 clerks, class two..... 4,200.00 1 clerk (by transfer from lump fund)..... 1,260.00 7 clerks, class one (increase of 1 by transfer from lump fund)..... 8,400.00 1 draftsman..... 1,200.00 1 draftsman..... 1,000.00 4 clerks, at \$1,000 each..... 4,000.00 3 clerks, at \$840 each..... 2,520.00 NOTE.—One carpenter at \$840 transferred to the Secretary's roll. 1 photographer..... 1,200.00 1 messenger..... 720.00 1 messenger or laborer..... 450.00 1 laborer..... 600.00 1 laborer (by transfer from lump fund)..... 300.00 1 charwoman or laborer..... 480.00 1 messenger boy..... 360.00 Total amount estimated (an increase over 1910 of \$1,920)..... <u>\$37,420.00</u> NOTE.—One clerk at \$1,260, 1 clerk of class one, and 1 laborer at \$300 have been added by transfer from lump fund. One carpenter at \$840 has also been transferred to the Secretary's roll. Net increase, \$1,920.
Total..... 34,413.55 Unexpended balance..... 286.45 Total amount of above appropriation..... <u>\$34,700.00</u>	The above force are performing the following duties: Administration and supervision: Chief of bureau..... \$3,500.00 Chief clerk..... 2,000.00 2 clerks, class one..... 2,400.00 Records and correspondence: 1 clerk, class two..... 1,400.00 2 clerks, class one..... 2,400.00 2 clerks, at \$1,000..... 2,000.00 3 clerks, at \$840..... 2,520.00 8,320.00 Field records and map section: 1 clerk, class four..... 1,800.00 1 clerk, class one..... 1,200.00 1 draftsman..... 1,200.00 1 draftsman..... 1,000.00 1 clerk..... 1,000.00 1 photographer..... 1,000.00 7,200.00 Editorial section: 1 clerk, class four..... 1,800.00 2 clerks, class two..... 2,800.00 1 clerk..... 1,000.00 5,600.00 Accounts: 1 clerk, class three..... 1,600.00 Property records: 1 clerk, class one..... 1,200.00 Messengers, carpenter, laborers, charwoman, etc.: 1 messenger..... 720.00 1 carpenter..... 840.00 1 laborer..... 450.00 1 charwoman..... 450.00 1 messenger boy..... 360.00 2,880.00 Total appropriation..... <u>\$34,700.00</u>	The above force will perform the following duties: Administration and supervision: Chief of bureau..... \$3,500.00 Chief clerk..... 2,000.00 2 clerks, class one..... 2,400.00 7,900.00 Records and correspondence: 1 clerk, class two..... \$1,400.00 1 clerk..... 1,200.00 3 clerks, class one..... 3,600.00 3 clerks, at \$1,000..... 3,000.00 2 clerks, at \$840..... 1,680.00 10,940.00 Field records and map section: 1 clerk, class four..... \$1,800.00 1 clerk, class one..... 1,200.00 1 photographer..... 1,200.00 1 draftsman..... 1,000.00 1 draftsman..... 1,000.00 1 clerk, class one..... 1,200.00 1 clerk..... 840.00 7,240.00 Editorial section: 1 clerk, class four..... 1,800.00 2 clerks, class two..... 2,800.00 1 clerk..... 1,000.00 5,600.00 Accounts: 1 clerk, class three..... 1,600.00 Property records: 1 clerk, class one..... 1,200.00 Messengers, carpenter, laborers, charwoman, etc.: 1 messenger..... \$720.00 1 laborer..... 600.00 1 laborer..... 450.00 1 charwoman..... 450.00 1 laborer..... 300.00 1 messenger boy..... 360.00 2,940.00 Total amount estimated..... <u>\$37,420.00</u>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600.</i>
Salaries:	Salaries:	Salaries:
In Washington..... \$66,961.40	In Washington..... \$60,000.00	In Washington..... \$60,000.00
Out of Washington..... 63,945.93	Out of Washington..... 70,000.00	Out of Washington..... 70,000.00
Stationery..... 988.45	Stationery..... 900.00	Stationery..... 900.00
Miscellaneous supplies, and services, equipment, books, machinery, etc..... 3,402.62	Miscellaneous supplies and services, equipment, books, machinery, etc..... 3,400.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 2,800.00
Furniture..... 1,660.32	Furniture..... 1,500.00	Furniture..... 1,000.00
Freight..... 4.33	Freight..... 50.00	Freight..... 50.00
Express..... 191.54	Express..... 190.00	Express..... 190.00
Telegraph..... 111.39	Telegraph..... 115.00	Telegraph..... 115.00
Telephone..... 45.30	Telephone..... 50.00	Telephone..... 50.00
Electricity..... 1,000.00	Apparatus, instruments, and laboratory material..... 2,000.00	Apparatus, instruments, and laboratory material..... 2,000.00
Apparatus, instruments, and laboratory material..... 4,967.11	Travel and station and field expenses..... 59,155.00	Travel and station and field expenses..... 56,495.00
Travel and station and field expenses..... 54,086.92		
Total expenditure to August 31, 1909..... 197,365.31	Total amount of appropriation (a decrease over 1909 of \$2,640)..... 197,360.00	Total amount estimated (a decrease over 1910 of \$3,760)..... 193,600.00
Less repayment to credit of appropriation..... 6.64		
Net expenditures to August 31, 1909..... 197,358.67		
Outstanding liabilities on August 31, 1909 (estimated)..... 1,980.48		
Balance to be turned back in Treasury (estimated)..... 660.85		
Total amount of appropriation..... 200,000.00		

NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Soils. This work fell naturally under the following projects:

PROJECTS.

Soil survey..... 145,542.62

This work comprises the surveying, both upon a detailed and reconnaissance basis, the mapping, and the classifying of the soils of important areas in various parts of the country and the preparing of reports containing descriptive matter relating to the different soils, their character, origin, and value for crops, and of the agricultural conditions found in each area surveyed. The maps show the distribution of the different soils, and the reports accompanying the maps describe these soils. Any unusual features observed in the field or shown by the analyses, the particular adaptation of certain types of soil to particular crops, desirable changes in the methods of cultivation or fertilizer practice are pointed out. The work of the soil survey is planned along lines so complete, and at the same time so practical, that the reports and maps are used not only by the landowners themselves in improving the methods of cultivation and of crop rotation, but also by real-estate firms in selling property, by state immigration officers, and by prospective purchasers generally. The mapping and classifying of the soils of the United States is also furnishing valuable basic information, which is coming to be used more and more by investigators in all lines of agricultural research. Requests are received annually for about 20,000 copies of these maps and reports. The base maps, which show the roads, streams, houses, and township boundaries, are furnished by the Geological Survey, or where their surveys have not extended, are secured from official records of government and county offices, or from such other sources as may be available.

NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are being incurred in prosecuting the important work of the Bureau of Soils. This work falls naturally under the following projects:

PROJECTS.

Soil survey..... 137,360.00

NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Soils. This work will fall naturally under the following projects:

PROJECTS.

Soil survey..... 135,160.00

The demand for soil-survey work is very great. On September 1, 1909, 654 requests were on file in the Bureau of Soils for additional surveys, covering an area of 645,768 square miles in the various States and Territories. The requests for this work come to the bureau as petitions from citizens of different counties; from boards of trade and chambers of commerce of cities located in prominent agricultural districts; from experiment stations; from large development companies; from railroads, to aid in their development work; from horticultural societies; from state departments of agriculture; from state geological surveys, and from various other sources. During the fiscal year 1909 soil-survey work was completed or begun in 70 different areas located in 30 different States, covering an area of 100,817 square miles. The surveys were assigned to these areas to meet the requirements of the most urgent requests on file in the Bureau of Soils, while at the same time extending the general knowledge of the Department of Agriculture concerning the major soil groups and the principal agricultural regions of the United States. The general plan has been kept in mind of securing such a thorough distribution of soil-survey areas in different portions of the United States as will ultimately lead to a complete knowledge of all of the different classes of soils which are found within the continental portion of the country. The number of requests received annually is increasing rather than decreasing.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
The following areas were surveyed in whole or in part during the fiscal year 1909:		
<i>Detailed surveys.</i>	<i>Detailed surveys.</i>	<i>Detailed surveys.</i>
Alabama:	Alabama:	Alabama:
Autauga County..... \$122. 61	The cooperative work between the Bureau of Soils and the Alabama State Department of Agriculture in the conduct of soil survey work in the State of Alabama. will be continued and the following soil surveys are in progress:	2. In cooperation with the Alabama Department of Agriculture and Industries, which is expending approximately \$8,000 of the state funds annually in connection with the work, soil surveys in ten additional counties should be made. This will involve an expenditure of not less than \$8,000 on the part of the Bureau of Soils. The counties to be surveyed are selected after conference between the Chief of the Bureau of Soils and the commissioner of agriculture and industries for Alabama concerning the needs of that State.
Work completed July 15, 1908; balance of area surveyed during previous fiscal year.....		These surveys are being conducted in response to legislative enactment by the State of Alabama, and to urgent requests from officers, representatives, and citizens of the State.
Baldwin County (490 square miles surveyed)..... 1,322. 61		
Area to be completed during fiscal year 1910.....		
Bibb County (110 square miles surveyed)..... 277. 25		
Work completed July 31, 1908; balance of area having been surveyed during the previous fiscal year.....		
Calhoun County (621 square miles surveyed)..... 1,496. 58	Square miles.	
Coffee County (261 square miles surveyed)..... 1,230. 70	Chambers County..... 590	
Area to be completed during fiscal year 1910.....	Clarke County..... 1,213	
Colbert County (600 square miles surveyed)..... 3,382. 18	Dale County..... 654	
Cullman County (741 square miles surveyed)..... 1,381. 58	Jackson County..... 1,163	
Hale County (576 square miles surveyed)..... 1,777. 48	Pike County..... 684	
	Tuscaloosa County..... 1,371	
	Upon the completion of the soil survey projects now in progress or assigned in the State of Alabama, five additional projects will be taken up after consultation with the commissioner of agriculture and industries for that State. About \$11,000 will be expended by the Bureau of Soils in the prosecution of this work during the fiscal year 1910.	
	Arkansas:	Arkansas:
	The assignment of the soil survey of Pulaski County will be continued during the fiscal year 1910, and it is anticipated that the work in this county can be completed at an estimated cost of \$1,600.	Not less than \$2,000 should be expended for detailed soil survey work in the State of Arkansas during the fiscal year 1911.
	California:	California:
	It is proposed to complete the soil survey of the following areas during the fiscal year 1910, at an estimated cost of \$8,000:	Not less than \$5,000 should be expended for soil survey work in the State of California during the fiscal year 1911. Detailed soil surveys have been made of the important citrus fruit region in southern California, and are in progress or assigned in the Great Central Valley. There remain, however, a large number of important agricultural sections in the smaller valleys along the Pacific coast, and of these practically no soil surveys have as yet been made. The funds allotted for work in the State of California should be equably divided between the prosecution of the work in the Great Central Valley and the undertaking of additional work in the fruit-growing valleys of the coast.
	Square miles.	
	Livermore Valley area.. 250	
	Madera County..... 2,000	
	Merced area..... 500	
	Red Bluff area..... 500	
	These areas are assigned in the continuation of the project for completing detailed soil surveys of the lands available for agricultural occupation in the Sacramento and San Joaquin valleys.	
	Connecticut:	
	Not less than \$1,500 should be expended in the cooperative soil survey of the lands in the vicinity of New Haven as requested by the authorities of the schools of forestry and geology of Yale University.	
		Colorado:
		There yet remain unsurveyed several important irrigated sections in the western and other parts of the State of Colorado, and the sum of \$2,000 should be devoted to soil surveys, giving preference to the lands that are comprised in the Reclamation Service projects, in which exact knowledge of the soil will aid in developing the lands along the lines for which they are best suited. In this way important alfalfa, sugar-beet, and fruit-growing industries may be quickly built up.
		Delaware:
		The sum of \$2,000, or as much of that sum as may be necessary to complete the soil survey of the State of Delaware, should be expended during the fiscal year 1911. This work is urgently requested by the officers of the State Grange and by the state commissioner of agriculture.
California:		
Porterville area..... 222. 24		
Work completed July 14, 1908; balance of area surveyed during previous fiscal year.....		
Yolo County (990 square miles surveyed)..... 7,635. 39		
Yuba-Sutter area (735 square miles surveyed)..... 6,615. 26		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
Florida: Marianna area (500 square miles surveyed)..... \$4,568.15	Florida: The Jacksonville area in Duval County, covering 350 square miles, has been assigned for complete soil survey during the fiscal year 1910. At the urgent request of the Jacksonville Board of Trade this survey is undertaken to determine the availability and adaptation of the soils in the vicinity of Jacksonville for the production of intensively farmed vegetable, fruit, and market garden crops. It is estimated that the sum of \$1,200 will be required for the completion of this area.	Florida: On account of the great interest which is being manifested in the development of the drained swamp lands in the Everglade section of Florida, a sum of not less than \$3,000 should be made available for a reconnaissance soil survey of a portion of the Everglades which is rapidly being made available for agricultural occupation through the construction of state and private drainage systems. Additional detailed soil surveys should also be made in western Florida.
Georgia: Hancock County (530 square miles surveyed)..... 1,142.96 Pike County (294 square miles surveyed)..... 2,553.51 Tift County (270 square miles surveyed)..... 1,517.25	Georgia: In pursuance of the policy of making detailed soil surveys of each of the counties in Georgia in which a congressional district agricultural high school is located, soil surveys will be made in the following counties: Square miles. Franklin County..... 344 Bulloch County..... 980 Sumter County..... 534 Agricultural high schools are located in the two latter counties. The completion of this work in the fiscal year 1910 will involve an expenditure of approximately \$3,500.	Georgia: In order that soil survey work may be continued in those counties of Georgia where agricultural high schools are located, and in the vicinity of such counties, for the direction of agricultural progress, the sum of not less than \$3,500 should be expended in additional soil surveys in the State during the fiscal year 1911.
Indiana: Allen County (667 square miles surveyed)..... 2,367.69		Indiana: In order that additional soil survey work may be undertaken in various portions of the State of Indiana in connection with the development of more specialized and intensive forms of agriculture, the soil survey of not less than two counties should be undertaken in the fiscal year 1911, at an approximate cost of \$2,500.
		Iowa: In order that the projects for the drainage of swamp lands in northern and northwestern sections of Iowa may be facilitated, it is desired that one of the northwestern counties containing considerable areas of swamp lands should be selected for a soil survey during the fiscal year 1911. The appropriate county should be designated by the authorities of the Iowa Agricultural College, under whose auspices the drainage work in the State is being encouraged. At the request of the authorities of the Iowa State Agricultural College, a soil survey of Pottawattamie County should be undertaken in the interests of orchard development. The sum of not less than \$2,500 should be expended in the prosecution of this work.
	Kentucky: The soil survey of Rockcastle County, containing 308 square miles, has been assigned for the fiscal year 1910, and will be completed at an estimated cost of \$1,000.	Kentucky: In order to meet the urgent demands for additional soil surveys in the tobacco-producing districts of western Kentucky, the sum of \$2,500 should be expended in the prosecution of this work in that section during the fiscal year 1911.
Louisiana: Lincoln Parish (510 square miles surveyed)..... 3,028.34 Area to be completed during the fiscal year 1910.	Louisiana: In response to urgent requests for the soil survey of Concordia Parish, for the purpose of determining the adaptability of its soils to crops other than cotton, the soil survey of this parish will be undertaken in 1910. The completion of the soil survey of the 707 square miles included within its boundaries should involve an expenditure of approximately \$2,800. It has been found impossible to assign additional soil surveys in the State for the fiscal year 1910.	Louisiana: Urgent requests bearing the indorsement of the state agricultural authorities and originating with agricultural and commercial societies, are on file in the bureau, asking for soil surveys in different sections of the State of Louisiana. Additional soil-survey work should be undertaken in the sugar-producing district of the alluvial lands and in the cotton-producing districts of the uplands. The sum of not less than \$3,500 should be made available for the prosecution

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>General expenses. Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses. Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
<p>Maine:</p> <p>Aroostook area (525 square miles surveyed)..... \$2,220.05</p> <p>Orono area..... 225.15</p> <p>Area begun June 3, 1909, and will be completed during fiscal year 1910.</p>	<p>Maine:</p> <p>At the urgent request of the Maine Agricultural Experiment Station a soil survey of the agricultural lands in the vicinity of Bangor and Orono was undertaken in the fiscal year 1909 and will be completed during the fiscal year 1910 at an approximate cost of \$600.</p>	<p>Maine:</p> <p>The soil survey of the agricultural sections of southwestern Maine should be continued as requested by the state agricultural authorities, to permit the reoccupation of agricultural lands and the development of special industries on soils best suited to the production of potatoes and orchard fruits. Not less than \$2,000 should be expended in the prosecution of this work in the fiscal year 1911.</p>
<p>Maryland:</p> <p>Anne Arundel County (155 square miles surveyed)..... 910.60</p> <p>Survey begun May 3, 1909, and will be completed during fiscal year 1910.</p>	<p>Maryland:</p> <p>In cooperation with the Maryland Geological Survey, a soil survey of Anne Arundel County, undertaken in the fiscal year 1909, will be completed during the fiscal year 1910. For the extension of this work in 1910 the soil survey of Baltimore County has been requested by the Maryland authorities, and the sum of \$2,000 should be made available for the prosecution of this work.</p>	
	<p>Massachusetts:</p> <p>At the request of the Massachusetts Agricultural College authorities, soil surveys should be undertaken in Barnstable and Plymouth counties. The sum of \$2,000 should be made available for the prosecution of this work in the fiscal year 1910.</p>	
<p>Michigan:</p> <p>Wexford County (572 square miles surveyed)..... 795.42</p>	<p>Michigan:</p> <p>The soil survey of Wexford County, undertaken in the fiscal year 1909, shows conclusively that large areas of the cut-over timber lands of the southern peninsula of Michigan could be made available for profitable agricultural occupation, and in order that a continuation of the soil surveys of this region may be conducted, the sum of not less than \$3,000 should be expended in detailed soil surveys of central Michigan counties in the fiscal year 1910.</p>	
<p>Minnesota:</p> <p>Rice County..... 28.03</p> <p>Area will be completed during fiscal year 1910.</p>	<p>Minnesota:</p> <p>The detailed soil survey of Rice County, comprising 516 square miles, will be completed during the fiscal year 1910 at an estimated cost of \$1,000.</p>	
<p>Mississippi:</p> <p>Scranton area (470 square miles surveyed)..... 2,166.33</p> <p>Clay County (411 square miles surveyed)..... 1,962.92</p>	<p>Mississippi:</p> <p>A cooperative agreement has been entered into between the Mississippi Geological Survey and the Bureau of Soils for the prosecution of soil-survey work in the State of Mississippi. For the season of 1910 the following soil surveys will be made at an estimated cost of \$2,500:</p>	<p>Mississippi:</p> <p>In order that the cooperative agreement between the Mississippi Geological Survey and the Bureau of Soils may be effectively carried on during the field season of 1911, not less than \$4,500 should be made available for expenditure by the Bureau of Soils in the continuation of this work.</p>
	<p>Square miles.</p> <p>Adams County..... 428</p> <p>Noxubee County..... 569</p>	
<p>Missouri:</p> <p>Bates County (866 square miles surveyed)..... 3,179.69</p> <p>Cedar County..... 165.74</p> <p>Area begun June 13, 1909, and will be completed during the fiscal year 1910.</p> <p>Cooper County (100 square miles surveyed)..... 415.50</p> <p>Area begun May 29, 1909, and will be completed during the fiscal year 1910.</p>	<p>Missouri:</p> <p>The soil surveys of the following counties in the State of Missouri will be continued or begun during the fiscal year 1910:</p>	<p>Missouri:</p> <p>In order that the cooperative soil-survey work conducted by the Missouri Soil Survey of the Missouri Agricultural Experiment Station and the soil survey of the Bureau of Soils of the United States Department of Agriculture may be effectively continued during the fiscal year 1911, not less than \$7,000 should be allotted for the continuation of this work.</p>
	<p>Square miles.</p> <p>Atchison County..... 532</p> <p>Cedar County..... 491</p> <p>Cooper County..... 562</p> <p>Jackson County..... 607</p> <p>Marion County..... 432</p> <p>Pemiscot County..... 509</p> <p>Washington County..... 744</p>	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$207,000—Continued.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>	<i>Detailed surveys—Continued.</i>
Nevada:	The soil-survey work in the State of Missouri is being conducted in direct cooperation with the Missouri Agricultural Experiment Station, which is providing a fund of not less than \$7,500 annually to be met by an equivalent expenditure on the part of the Bureau of Soils. The Missouri authorities, in addition to their expenditure of funds, are furnishing competent soil experts to assist in the conduct of the work.	
Truckee-Carson area..... \$109.44	Nevada: The soil survey of the Truckee-Carson Project of the United States Reclamation Service, begun in the fiscal year 1909, will be completed in 1910 at an estimated cost of \$1,400.	
Area begun June 25, 1909, and will be completed during the fiscal year 1910.	New Hampshire: At the request of the New Hampshire Agriculture College and Experiment Station, the soil survey of southern Hillsboro County will be undertaken to serve as a basis for later horticultural surveys and horticultural development work by the state agricultural authorities. It is estimated that this area will be completed at a cost of \$1,400.	
New Jersey:	New Jersey: The soil-survey work in cooperation with the New Jersey Agricultural Experiment Station and the New Jersey Geological Survey, begun in Sussex County in the fiscal year 1909, will be completed in 1910 at an estimated cost of \$1,500.	New Jersey: For the proper continuation of cooperative soil-survey work with the New Jersey Agricultural Experiment Station and the New Jersey Geological Survey, the sum of not less than \$2,500 should be made available for work in that State in the fiscal year 1911.
Sussex County..... 237.86	New York: In continuation of the soil-survey work in cooperation with the New York State College of Agriculture, the soil survey of Washington County, begun in the fiscal year 1909, will be completed in 1910. The soil survey of Ontario County, similarly assigned, will be completed during the year.	New York: In order to continue the cooperative soil-survey work with the New York State College of Agriculture, the sum of not less than \$3,500 should be allotted for such work in New York State in the fiscal year 1911.
Work begun June 5, 1909, and will be completed during fiscal year 1910.	The New York State College of Agriculture contributes both money and men for the prosecution of this work, and is following each of the soil-survey projects with investigations in regard to the agricultural and horticultural possibilities of the regions covered. It is estimated that the sum of \$3,500 will be expended in this State during the present fiscal year.	
New York:	North Carolina: The soil surveys of Gaston and Scotland counties, begun in the fiscal year 1909, will be completed in the fiscal year 1910, and soil surveys of Cabarrus, Cumberland, Granville, and Mecklenburg counties will be undertaken. This work is carried on in cooperation with the North Carolina State Department of Agriculture, which furnishes both funds and men for the prosecution of the work within the State. This work will be completed at an estimated cost of \$5,000.	North Carolina: In response to urgent requests from the North Carolina state department of agriculture, and from large numbers of agricultural and business organizations in the State of North Carolina, the cooperative soil-survey work in this State should be considerably increased and its progress expedited. Not less than \$5,000 should be made available for cooperative soil-survey work during the fiscal year 1911.
Livingston County (629 square miles surveyed)..... 2,770.86	North Dakota: At the request of the state agricultural authorities, detailed soil surveys will be made of proposed agricultural experiment station lands in the Beach and Page areas, at an estimated cost of \$900.	North Dakota: The sum of not less than \$1,000 should be made available for cooperative soil-survey work in the State of North Dakota in the fiscal year 1911.
Montgomery County (495 square miles surveyed)..... 1,314.19	Ohio: The soil survey of Auglaize County, comprising an area of 400 square miles, will be completed during the fiscal year 1910 at an estimated cost of \$600.	Ohio: In order that additional soil-survey work may be undertaken in the State of Ohio in the fiscal year 1911, the sum of not less than \$2,500 should be made available for this purpose.
Washington County (305 square miles surveyed)..... 757.10		
Survey begun May 13, 1909, and will be completed during fiscal year 1910.		
North Carolina:		
Caswell County (406 square miles surveyed)..... 2,249.08		
Robeson County..... 270.76		
Work completed July 27, 1908, balance of area having been surveyed during previous fiscal year.		
Gaston County..... 103.31		
Survey begun June 23, 1909, and will be completed during fiscal year 1910.		
Pitt County (650 square miles surveyed)..... 1,711.03		
Scotland County (100 square miles surveyed)..... 556.33		
Survey begun May 29, 1909, and will be completed during fiscal year 1910.		
Lake Mattamuskeet project (176 square miles surveyed)..... 541.86		
North Dakota:		
Richland County (1,453 square miles surveyed)..... 3,666.81		
Ohio:		
Auglaize County..... 43.61		
Survey begun June 20, 1909, and will be completed during fiscal year 1910.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
Soil investigations, 1909, \$200,000—Continued.	General expenses, Bureau of Soils, 1910, \$197,360—Continued.	General expenses, Bureau of Soils, 1911, \$193,600—Continued.
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detailed surveys—Continued.	Detailed surveys—Continued.	Detailed surveys—Continued.
Oklahoma:	Oklahoma:	
Craig County..... \$51.07	The soil survey of Craig County, begun in the fiscal year 1909, will be resumed and completed during the fiscal year 1910 at an estimated cost of \$1,760.	
Area to be completed during the fiscal year 1910.		
Oregon:	Oregon:	Oregon:
Klamath Falls area (249 square miles surveyed)..... 2,668.75	The soil survey of the Coos Bay region, begun in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$2,500. Additional work will be undertaken in this State during the current fiscal year at an estimated cost of \$1,000.	In order that the rapidly developing orchard regions of the State of Oregon may be properly studied with respect to their soils, the sum of not less than \$3,000 should be made available for the prosecution of this work during the fiscal year 1911.
Coos County..... 83.66		
Area to be completed during fiscal year 1910.		
Pennsylvania:	Pennsylvania:	Pennsylvania:
Berks County (120 square miles surveyed)..... 420.19	The soil survey of Berks County, containing 574 square miles, begun in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$2,000.	In order to meet the urgent requests of local granges, agricultural associations, and business bodies, supported in certain instances by the state department of agriculture and the State Agricultural College, not less than three detailed soil surveys should be made in the State of Pennsylvania in the fiscal year 1911.
Area begun May 15, 1909, and will be completed during fiscal year 1910.		
Center County (833 square miles surveyed)..... 3,055.29		
Area surveyed in part during previous fiscal year.		
South Carolina:	South Carolina:	South Carolina:
Anderson County (756 square miles surveyed)..... 2,034.96	The soil surveys of the Conway area, 500 square miles, in Horry County, and of Saluda County, 438 square miles, begun in the fiscal year 1909, will be completed during the fiscal year 1910, and the soil survey of Clarendon County, 710 square miles, will be undertaken. This work will be completed at an estimated cost of \$2,500.	Square miles. Bedford County..... 1,070 Erie County..... 782 Susquehanna County.. 823 The sum of not less than \$4,000 should be made available for the prosecution of this work, and to some degree the State College of Agriculture will enter into cooperation with the Bureau of Soils for the purpose of facilitating the work.
Conway area (500 square miles surveyed)..... 2,488.72		
Area to be completed during fiscal year 1910.		
Saluda County (438 square miles surveyed)..... 772.86		
Area to be completed during fiscal year 1910.		
Tennessee:	Tennessee:	Tennessee:
Coffee County (261 square miles surveyed)..... 1,537.05	The soil survey of one additional county will be undertaken in Tennessee during the fiscal year 1910, at an expenditure of about \$1,200.	The great diversity of the soils in the State of Tennessee, and widespread requests for additional soil surveys, which requests cover three-fourths of the counties in the State, strongly indicate the necessity for additional work of this character. Not less than \$2,500 should be expended on soil-survey work in Tennessee in the fiscal year 1911.
Overton County (433 square miles surveyed)..... 892.69		
Area surveyed in part during previous fiscal year.		
Sumner County (520 square miles surveyed)..... 1,651.92		
Area to be completed during fiscal year 1910.		
Texas:	Texas:	Texas:
Camp County (202 square miles surveyed)..... 1,751.97	In response to numerous requests, a soil survey of Ellis County, comprising 1,066 square miles, will be made during the fiscal year 1910, at an approximate cost of \$3,500.	
Grayson County (1,012 square miles surveyed)..... 5,437.10		
Area to be completed during fiscal year 1910.		
Morris County (278 square miles surveyed)..... 1,025.00		
Titus County (421 square miles surveyed)..... 1,738.63		
	Utah:	Utah:
	Urgent requests have been received for the soil survey of the agricultural lands of Cache County, and the sum of \$2,100 should be allotted for making this survey during the fiscal year 1910.	The construction of additional transportation systems, and the opening of considerable areas of dry farm land in various portions of the State of Utah, would indicate that additional soil surveys should be undertaken in the southern and southwestern portions of the State during the fiscal year 1911. Not less than \$3,500 should be made available for this work.
	Vermont:	Vermont:
	Only one soil survey has thus far been made in the State of Vermont. In the interest of the dairy industry in the northern portion of the State, it would seem desirable to undertake the soil survey of one additional area in that section and the sum of \$1,200 should be made available for this work in the fiscal year 1911.	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Detailed surveys—Continued.	Detailed surveys—Continued.	Detailed surveys—Continued.
Virginia: Campbell County (70 square miles surveyed)..... \$366.68 Area begun June 2, 1909, and will be completed during fiscal year 1910.	Virginia: The soil survey of Campbell County, begun in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$1,600.	Virginia: In response to urgent requests, additional detailed soil surveys should be made in the State of Virginia, particularly in the tide-water section where there is need for a determination of the lands suitable to trucking and market gardening, and in the western portion of the State where the establishment of orchard industries requires similar surveys. In order that the agricultural interests of the State of Virginia may be properly served, not less than \$5,000 should be expended in that State during the fiscal year 1911.
West Virginia: Parkersburg area (812 square miles surveyed)..... 923.10 Area surveyed in part during previous fiscal year. This work is carried on in cooperation with the West Virginia Geological Survey, which bureau pays all field expenses as well as furnishing field assistants.	West Virginia: The soil survey of the Spencer area, begun in the fiscal year 1909, will be completed in 1910. An additional area of not less than 1,000 square miles will be undertaken before the end of the fiscal year. The total cost to the Bureau of Soils will approximate \$2,000. This work is carried on in cooperation with the West Virginia Geological Survey.	West Virginia: The director of the West Virginia Geological Survey requests that the Bureau of Soils increase the number of men assigned to the State of West Virginia in order that more rapid progress may be made with the soil survey of that State. The West Virginia Geological Survey supplies money for the payment of all of the field expenses of the soil survey parties while at work in that State, thus materially reducing the cost of the work in the State, so far as federal appropriations are concerned.
Wisconsin: Bayfield County..... 219.59 Survey begun June 12, 1909, and will be completed during fiscal year 1910.	Wisconsin: The soil survey of the Bayfield area, begun in the fiscal year 1909, will be completed in 1910, and in addition the following areas will be completed:	Wisconsin: In order that the cooperative soil survey agreement entered into between the Wisconsin Agricultural College and the Wisconsin Geological Survey and the Bureau of Soils may be properly carried out, the sum of not less than \$8,000 should be allotted for the prosecution of this work in the State of Wisconsin during the fiscal year 1911.
Arlington Farm..... 2,267.75	Square miles. Iowa County..... 763 Waukesha County... 562 Waushara County.... 639 These soil surveys are carried on in cooperation with the Wisconsin Agricultural College and Wisconsin Geological Survey, each of these organizations furnishing men and funds for the prosecution of the work. Not less than three additional soil surveys should be undertaken during the fiscal year 1910, to be completed in 1911, as weather conditions permit, at an approximate cost of \$5,000.	
Reconnaissance surveys.	Reconnaissance surveys.	Reconnaissance surveys.
Arkansas..... 31.72 Work begun June 26, 1909, and will be continued during fiscal year 1910.	Arkansas: The reconnaissance soil survey of the Ozark Mountain and Plateau region in Arkansas and adjoining States, which was begun in the fiscal year 1909, will be continued during the fiscal year 1910 at an estimated cost of \$1,200.	Arkansas: The completion of the reconnaissance soil survey of the Ozark region of Arkansas will require the expenditure of approximately \$750 during the fiscal year 1911.
Western North Dakota (39,240 square miles surveyed)..... 15,240.29 Work begun during previous fiscal year.	Michigan: Reconnaissance soil survey work in the cut-over timber lands of northern Michigan has been urgently requested, and it would be desirable to begin work on this project in the field season of 1910 with the expenditure of not to exceed \$1,500.	Michigan: In order that possible cooperative soil survey work in the reconnaissance soil survey of the cut-over timber lands of northern Michigan may be undertaken in the fiscal year 1911, the sum of not less than \$4,210 should be made available for this work during that fiscal year.
Northwestern Pennsylvania (8,112 square miles surveyed).. 3,901.86 Work begun during previous fiscal year.		Western Kansas: The reconnaissance soil survey of western Kansas during the fiscal year 1911 will require an expenditure of approximately \$4,000.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil investigations, 1909, \$200,000—Continued.</i>	<i>General expenses, Bureau of Soils, 1910, \$197,360—Continued.</i>	<i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>Reconnaissance surveys—Continued.</i>	<i>Reconnaissance surveys—Continued.</i>	<i>Reconnaissance surveys—Continued.</i>
Southwestern Pennsylvania (2,016 square miles surveyed).. Work begun May 4, 1909, and will be completed during fiscal year 1910.	Western Nebraska: The reconnaissance soil survey of western Nebraska will be undertaken toward the end of the fiscal year 1910 and continued to completion during the fiscal year 1911. It is estimated that not more than \$3,500 will be expended upon this work during the fiscal year 1910. Southwestern Pennsylvania: The reconnaissance soil survey work in this section, begun in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$3,500.	Western Nebraska: The reconnaissance soil survey of western Nebraska which will be begun in the fiscal year 1910 will be completed in 1911 at an estimated cost of \$7,500.
Western South Dakota..... Work begun June 11, 1909, and will be completed during fiscal year 1910.	Western South Dakota: The reconnaissance soil survey work in western South Dakota, begun in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$10,000.	Western Oklahoma: Upon the completion of the reconnaissance soil survey in western Kansas and Nebraska, it is anticipated that a sufficient amount of time will be available in the fiscal year 1911 to at least make a beginning upon the reconnaissance soil survey in western Oklahoma, and for this purpose the sum of not to exceed \$1,000 should be made available.
Panhandle of Texas (10,000 square miles surveyed)..... Area to be completed during fiscal year 1910.	Gulf coast section of Texas: The reconnaissance soil survey of the Gulf coast section of Texas, adjoining the work already completed in southwest Texas, will be undertaken and completed during the fiscal year 1910 at an estimated cost of \$10,000. Panhandle of Texas: The reconnaissance soil survey work, begun in this region in the fiscal year 1909, will be completed during the fiscal year 1910 at an estimated cost of \$12,500.	Northeastern Pennsylvania: The sum of \$3,500 should be made available for the prosecution and extension of the Appalachian reconnaissance soil survey in northeastern Pennsylvania in the fiscal year 1911.
South Texas (16,890 square miles surveyed).....		Western Texas: The sum of \$8,000 should be made available for reconnaissance soil survey work in western Texas in the fiscal year 1911.
Washington (200 square miles surveyed)..... Work begun June 14, 1909, and will be continued during fiscal year 1910. The value of the reconnaissance soil survey of lands at present unoccupied for agricultural purposes, or but partially occupied, has been recognized by the authorities of several of the different States, and as a result the class of work which was started in the Great Plains region and in the Appalachian region has been requested by the state authorities of Wisconsin, Missouri, and Washington for the rapid determination of the character and agricultural value of lands in these three States: In Wisconsin the cut-over timber lands of the northern portion of the State afford excellent opportunity for occupation for the production of certain special crops to which considerable areas of the soil are known to be adapted. The separation of agricultural soils from nonagricultural areas is necessary for the guidance of agricultural settlers in order that only such lands as are capable of agricultural occupation may be offered for settlement. Large tracts of timber land in the Puget Sound region of Washington have been cut over within the last few years, and the agricultural possibilities of the soils thus deforested are imperfectly known and scarcely appreciated. In order that the state authorities may be guided in their separation of lands capable of agricultural occupation from those lands which should be promptly reforested, the State of Washington made a special appropriation to be expended by its geological survey for the rapid reconnaissance of these cut-over timber lands in cooperation with the Bureau of Soils.	Washington: The reconnaissance soil survey of the cut-over timber lands in the State of Washington, begun in the fiscal year 1909 and which is carried on in cooperation with the Washington State Geological Survey, will be continued during the fiscal year 1910 at an estimated cost of \$5,000.	Washington: In order to continue in cooperation with the Washington State Geological Survey, the reconnaissance soil survey of the cut-over timber lands of the Puget Sound region of Washington, the sum of \$3,000 should be made available for this work in the fiscal year 1911.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p><i>Soil investigations, 1909, \$200,000—Continued.</i></p> <p>PROJECTS—continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p> <p>In southern Missouri, northern Arkansas, and eastern Oklahoma there exist in the Ozark Mountain and Plateau region extensive sections of lands which are capable of agricultural occupation both for general and special purposes. The section is thinly settled and the valuable lands are not easily separable from nonagricultural mountain land. It is not deemed expedient at the present time to conduct detailed soil surveys in this section, yet settlement is taking place in many portions of the region, and a general knowledge of the character of the soils is desirable for the guidance of settlers.</p> <p>In the case of the State of Missouri the State authorities have requested the Bureau of Soils to cooperate with the State College of Agriculture and the State Experiment Station in the examination of these lands, and the expert who is furnished by the State of Missouri for the conduct of this work should continue and complete the reconnaissance of the entire region located in the three States named.</p> <p>Soil surveys made in the cut-over timber lands of Michigan on the detailed scale have shown that large bodies of valuable agricultural land exist in this section, interspersed with land which under present conditions is chiefly valued for reforestation. Large quantities of lands of both classes are being offered for sale to settlers who are frequently unable to discriminate between the two classes of land. In order that the interests of the settlers may be properly guarded, and in order that the State Reforestation Commission may be guided in its efforts to reforest large tracts of these lands, a reconnaissance soil survey of the cut-over timber lands of Michigan should be begun at once. The area to be covered and the urgency of the necessity are too great to permit of the making of detailed soil surveys over all of the 25,000 or 30,000 square miles of such territory known to exist in the State of Michigan. The immediate purposes could well be served by a reconnaissance soil survey.</p> <p><i>Soil laboratory investigations, \$20,412.96.</i></p> <p>The laboratories furnish the physical and chemical data necessary for the interpretation of the field studies of the bureau. The amount of analytical work thus required has continued to increase with the growing requirements of the field investigations, augmented by increasing demands for such data from other bureaus and offices. Certain fundamental investigations have been conducted, called for by the problems in the field work and necessary to the understanding of the handling of soils and fertilizers.</p> <p>Physical soil investigations..... \$7,099.75</p> <p>Including:</p> <p>(a) Conservation of soil moisture. The object of this investigation was to determine the loss of water by evaporation from various soil types with different sorts of mulches, and under different physical conditions, due to different cultural methods, with a view to devising the best method of conserving the soil moisture in semiarid regions.</p> <p>(b) Relation of soil moisture to physical condition of soils. The object of this investigation was to determine the effect of various moisture conditions upon the practical handling of the soil, with a view to putting it in the best condition for plant growth.</p> <p>(c) Flocculation, sedimentation, and erosion of soils. The object is to study soil erosion and methods for its prevention. The physical character of the soil is of prime importance in an investigation of the extent and rate of erosion, and a study of the physical condition and structure of soil is necessary to a complete understanding of the influence of organic and mineral fertilizers in promoting flocculation and sedimentation of various soil types.</p> <p>(d) Absorption of vapors and gases by soils. The object of this investigation was to determine the ability of different soil types to condense on the surface of the grains water vapor and other gases present in the soil atmosphere, especially the gaseous products of the decomposition of organic matter.</p> <p>(e) Retention and conservation of fertilizer ingredients by soils. This investigation had for its object the determination of the ability of different soil types to absorb the substance commonly employed in fertilizer practice. It has been shown that different soils possess widely different absorptive powers for the various fertilizer ingredients. The fact that there is this absorption is of the utmost importance in conserving for future use the excess of plant nutrients</p>	<p><i>General expenses, Bureau of Soils, 1910, \$137,860—Continued.</i></p> <p>PROJECTS—continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p> <p>Wisconsin:</p> <p>A reconnaissance soil survey of Marinette County will be made during the fiscal year 1910, at an estimated cost of \$1,500. This work will be carried on in cooperation with the Wisconsin Geological Survey, which furnishes both men and funds for the prosecution of the work.</p> <p><i>Soil laboratory investigations, \$27,670.</i></p> <p>Physical soil investigations..... \$10,000.00</p>	<p><i>General expenses, Bureau of Soils, 1911, \$193,600—Continued.</i></p> <p>PROJECTS—continued.</p> <p><i>Reconnaissance surveys—Continued.</i></p> <p>Wisconsin:</p> <p>In order to continue the cooperative agreement between the Wisconsin Geological Survey and the Bureau of Soils for the reconnaissance soil survey of the cut-over timber lands of northern Wisconsin, the sum of not to exceed \$2,500 should be made available for the extension of this work in 1911.</p> <p><i>Soil laboratory investigations, \$27,670.</i></p> <p>Physical soil investigations..... \$10,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p><i>Soil laboratory investigations, \$20,412.96—Continued.</i></p> <p>PROJECTS—continued.</p> <p>(j) Leaching of soils. The rate of removal of plant food and other constituents from humid soils and of the excess of soluble salts from the alkali soils has been made the object of examination. The composition of drainage waters at successive stages of reclamation have indicated that much longer periods are necessary to remove some of the harmful ingredients than others, and that this leaching influences the physical structure of the soil. The different soil types are leached at very different rates, depending upon the texture, amount of organic matter, etc.</p> <p>(k) Wind movement of soils. The object of this investigation is to determine the extent of translocation of soil material by æolian agencies. It has been shown that the wind carries soil materials for hundreds and even thousands of miles, and at the place of precipitation of the soil material very great changes occur in the soil conditions. The wind is the most important agency in mixing the various rock-forming minerals in the soil.</p> <p>(l) Soil temperatures. The object of this work was to determine the power of various soils to transmit heat and the influence of the moisture condition on this heat transmission. It has been found that a dry soil conducts heat very much slower than one moderately moist. This throws light upon the condition known by agriculturists as the "optimum moisture condition," the use of flooding in cranberry culture and similar crops, the choice of time for plowing, etc.</p> <p>(m) Investigation of routine methods of analysis. Improving and shortening methods for estimating the physical properties of soils, such as texture, porosity, etc. Inventing, constructing, and testing of apparatus to these ends.</p> <p>(n) Physical properties of alkali soils. Modifications of usual properties induced by the presence of different types of alkali, and new properties brought about by special kinds of alkali.</p> <p>(o) Nature of hardpans. Hardness, porosity, penetrability, and properties of an agronomic significance.</p> <p>(p) Effect of flood waters, winds, and other natural agencies on the accumulation and segregation of the rock-forming minerals, and their degradation and decomposition products in soils.</p> <p>Chemical investigations..... \$7,790.07</p> <p>Including:</p> <p>(a) Phosphates of soils and fertilizers. The object of this investigation was to obtain more definite knowledge of the phosphates of soils and fertilizers, with special reference to their chemical character and chemical interactions which take place when phosphate fertilizers are added to the soil, with a view to explaining many observed phenomena of fertilizer practice and to suggest the kind of phosphate best adapted to any particular soil type.</p> <p>(b) Nitrogen carrying fertilizers. The object of this investigation was to obtain more definite information regarding the amount and nature of nitrogen in various fertilizing materials, such as lime-nitrogen, cyanamid, sodium nitrate, etc.</p> <p>(c) Chemical and mineralogical composition of soil separates. The object of this study is to separate the soil into fractions according to the size of the particles, and to determine the chemical and mineralogical composition of the various separations of the different soil types. It was shown that there is a larger percentage of the mineral nutrients in the smaller grains, but that these mineral nutrients as well as the minerals from which they were derived are scattered through the grains of all sizes. The solution of these minerals in the soil moisture supply the plant with its required nutrients.</p> <p>(d) Solubility of soil minerals. The object of this work is to investigate the rate at which different sized soil grains and different soil minerals dissolve in the soil moisture to supply growing crops with their needed nutrients.</p> <p>(e) Chemical properties of humus. Of all the soil constituents probably more has been written about humus than any of the other constituents. In spite of this, probably less has been definitely established than about any of the other constituents. The object of this work is therefore to clear up some of the contradictory views regarding humus and to find in what way it reacts upon the other materials of the soil, and affects both the physical and chemical properties of the soil.</p> <p>(f) Iron compounds of the soil. The object of this investigation is to determine whether the relative productive power of soils is due to the nature of the iron compounds in the red and yellow soils, or whether these colors are merely indicative of present or past conditions controlling not only the color of the iron compounds, but also other factors which are directly responsible for productivity.</p> <p>(g) Alkali soils. The object of this work is to determine the nature and composition of the harmful salts contained in alkali soils, and of the irrigation and drainage waters from the soils, in order to aid the field parties in the reclamation of these soils, and to give information which will be of value in adopting suitable methods of reclama-</p>	<p><i>Soil laboratory investigations, \$27,670—Cont'd.</i></p> <p>PROJECTS—continued.</p> <p>Chemical investigations..... \$10,970.00</p>	<p><i>Soil laboratory investigations, \$27,670—Cont'd.</i></p> <p>PROJECTS—continued.</p> <p>Chemical investigations..... \$10,970.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil laboratory investigations, \$20,412.96—Continued.</i>	<i>Soil laboratory investigations, \$27,670—Cont'd.</i>	<i>Soil laboratory investigations, \$27,670—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
tion and to assist in the selection of crops most resistant to the different kinds of alkali salts and to different combinations of these salts.		
(h) Investigation of routine methods of analysis. The object of this work is to devise and perfect the methods of physical and chemical analysis, so as to attain greater accuracy and speed, made necessary by the increasing amount of work and the increased demand for more detailed knowledge in solving soil problems.		
(i) Field demonstration. The object of this work is to demonstrate certain laboratory results in the field.		
(j) Nature of hardpans. Their chemical constitution; how they are formed, and how they are disintegrated by weathering and by cultural methods.		
Unclassified analytical work..... \$3,988.09	Unclassified analytical work..... \$5,000.00	Unclassified analytical work..... \$5,000.00
This work comprises the analysis of miscellaneous samples of soils, fertilizers, irrigation and drainage waters, etc. There is always a certain amount of such miscellaneous work sent in by the field parties of the bureau, and other bureaus and departments, and these analyses throw more or less light upon specific soil conditions.		
Designing and repairing apparatus for field and laboratory studies..... 1,535.05	Designing and repairing apparatus for field and laboratory studies... 1,700.00	Designing and repairing apparatus for field and laboratory studies... 1,700.00
The laboratory investigations of the physical and chemical properties of soils and the field tests require special apparatus designed and constructed under the immediate supervision of the men engaged in the work.		
<i>Soil fertility investigations, \$17,899.22.</i>	<i>Soil fertility investigations, \$20,330.</i>	<i>Soil fertility investigations, \$20,330.</i>
Investigations of the causes of, and remedy for, infertility in certain soils and of the low crop yields arising in many soils from improper methods of cultivation and cropping; the separation, identification, and study of organic substances found in unproductive soils and their correction by mechanical handling, by use of fertilizers, and by other methods available to the farmer.		
Investigation of the maintenance of soil fertility..... 2,605.04	Investigation of the maintenance of soil fertility..... 3,060.00	Investigation of the maintenance of soil fertility..... 3,060.00
This project is to investigate the permanency of soil fertility of the important soil types of the United States, with a view to avoid soil deterioration by improper methods of cultivation and cropping. Especial attention has been paid to the staple crops, corn, wheat, oats, potatoes, etc., which are proving to have very injurious effects on the soil when continually grown on the same land. In laboratory investigations the nature of the soils are being studied with a view to determine the effect of these crops upon the various factors which influence soil productivity. By a proper understanding of these factors in the laboratory and in the field, the best systems of soil management and crop rotation will be devised for successful agriculture on the various soil types.		
Investigation of the causes of unproductive soils..... 3,966.99	Investigation of the causes of unproductive soils..... 4,200.00	Investigation of the causes of unproductive soils..... 4,200.00
This project is to determine in soils the causes or factors of low crop production. The deterioration of soils results from various conditions, such as poor drainage and aeration, and from poor cultivation, improper succession of crops, or improper crop adaptation. It has already been shown that the poor qualities of unproductive soils are not always due to a lack of mineral plant food, but often to the presence of substances actually hindering plant growth. Extended investigations have been carried on with infertile soils in determining the presence of toxic bodies, in isolating and identifying these bodies, and in studying their properties. The toxic bodies found are carbon compounds, and it has been shown that the productiveness of a soil depends largely upon the condition of the organic matter in the soil and the processes which are at work in destroying the plant remains. The properties of these and related compounds in soils have been studied with reference to their effect on plant growth and much valuable information obtained concerning the processes of decay of organic matter in soils.		
Investigation of the organic origin of unproductivity in soils and the effect of green manuring..... 3,382.97	Investigation of the organic origin of unproductivity in soils and the effect of green manuring..... 3,867.67	Investigation of the organic origin of unproductivity in soils and the effect of green manuring..... 3,867.67
The origin of the toxic substances and the conditions which lead to their formation have been investigated; namely, whether they are formed by the accumulation of root excreta in the soil under a one-crop system, where they are not taken care of by natural process of destruction and decay, due to improper drainage, aeration, cultivation; whether they are the products of germination; of bacterial or other life processes within the soil; or whether they are formed by the decomposition of vegetable matter under unfavorable conditions in the soil. The effects of green and stable manuring and the products of their decomposition in the soil have been studied to determine the manner of and relative effectiveness in overcoming unfavorable conditions in soils.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Soils—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Soil fertility investigations, \$17,899.22—Continued.</i>	<i>Soil fertility investigations, \$20,330—Continued.</i>	<i>Soil fertility investigations, \$20,330—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Investigation of means for improvement of unproductive soils.....	Investigation of means for improvement of unproductive soils.....	Investigation of means for improvement of unproductive soils.....
\$2,407.50	\$2,955.00	\$2,955.00
The object of this line of investigations has been the determination of the conditions and treatment necessary to attack or destroy unfavorable organic materials in the soil, rendering them harmless to crops. Among these has been the action of fertilizers, the action of plant roots, the effect of cultivation, with its resulting aeration and oxidation, and also the influence of crop rotation and the action of substances not regarded as furnishing plant foods. Attention is also being paid to the remedy of conditions which cause the formation of these unfavorable bodies.		
Investigation of the effect of fertilizers on soils.....	Investigation of the effect of fertilizers on soils.....	Investigation of the effect of fertilizers on soils.....
1,636.66	3,438.00	3,438.00
The object of this work is to determine the function of fertilizers in various soil types and crops. It has already been demonstrated that substances commonly used as fertilizers have, in addition to their functions as plant nutrients, a well-defined power to overcome and destroy harmful bodies in the soil; facts of distinct value in the study of soil and fertilizer problems. This investigation includes the time and mode of action of fertilizers on harmful soil constituents, the best time of application, the proportions of the fertilizing constituents, and the effect of fertilizers under different climatic conditions and with different crops, with a view to establishing the best systems of fertilization consistent with economy.		
Field investigations of soil fertility problems in cooperation with experiment stations.....	Field investigation of soil-fertility problems in cooperation with experiment stations.....	Field investigation of soil-fertility problems in cooperation with experiment stations.....
1,821.76	1,900.00	1,900.00
Cooperation has been arranged with a number of the experiment stations to investigate local cases of infertile soils or of soil deterioration. Notable among these is the study of flax-sick soil in North Dakota, potato-sick soil in California, the exhaustion of soils under a rotation of crops which has been carried on for twenty-five years at the Pennsylvania station.		
General field and laboratory supplies, new.....	General field and laboratory supplies, new.....	General field and laboratory supplies, new.....
2,078.30	910.00	910.00
<i>Soil erosion, \$5,018.15.</i>	<i>Soil erosion, \$5,000.</i>	<i>Soil erosion, \$5,000.</i>
This project has for its object the investigations of the extent of damage arising from the erosion of cultivated soils and the most practical remedial measures for checking the same. It is, in effect, to study the reasons of and remedies for one of the most important causes of the loss of soil fertility. To it may be charged the wasting of wide areas of the arable soils of the United States, and the evil does not end there, for the products of erosion prove a source of menace to and interference with the navigation of the waterways of the country. Desultory efforts have been made, through various methods of treatment, to preserve the soils and prevent this waste, but it is now proposed that a systematic study should be made of different soils and of practical methods of preventing their bodily removal from the fields.		
Reconnaissance study of the effect of erosion on agricultural lands.....	Reconnaissance study of the effect of erosion on agricultural lands.....	Reconnaissance study of the effect of erosion on agricultural lands.....
5,018.15	5,000	5,000
<i>Administration.</i>	<i>Administration.</i>	<i>Administration.</i>
Miscellaneous supplies, laboratory apparatus, clerical hire, hire of laborers, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories in Washington, D. C.:	Miscellaneous supplies, laboratory apparatus, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories in Washington, D. C.	Miscellaneous supplies, laboratory apparatus, and miscellaneous and contingent expenses for maintenance and operation of offices and laboratories in Washington, D. C.
Telephone.....		
45.30	7,000	5,440
Telegraph.....		
111.39		
Freight.....		
4.33		
Express.....		
191.54		
Gas and electricity.....		
1,000.00		
Furniture.....		
1,660.32		
Miscellaneous supplies, apparatus, stationery, typewriters, laboratory apparatus for new building, etc.....		
936.69		
1 laborer at \$600; 1 laborer, \$300; clerical hire, \$476.11.....		
1,376.11		
Alberene equipment, and salaries of plumbers and laborers while installing the same in new building.....		
1,650.37		
1 watchman, at \$720 a.....		
\$670.00		
1 laborer, at \$720 a.....		
458.00		
1 laborer, at \$8600 a.....		
381.67		
1,509.67		
Total.....		
8,485.72		
Total appropriation for Bureau of Soils.....	Total appropriation for Bureau of Soils (a decrease over 1909 of \$1,840).....	Total amount estimated for Bureau of Soils (a decrease over 1910 of \$1,840).....
234,700.00	232,860.00	231,020.00
Net expenditures to August 31, 1909.....		
231,772.22		
Outstanding liabilities on August 31, 1909 (estimated).....		
1,980.48		
Balance to be turned back in Treasury (estimated).....		
947.30		

a Transferred from Secretary's roll.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

BUREAU OF ENTOMOLOGY.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Entomology, 1909, \$26,160.</i>		
Howard, L. O. Chief of bureau, at \$4,000	1 entomologist, who shall be chief of bureau	1 entomologist, who shall be chief of bureau
Clifton, R. S. Chief clerk, at \$1,800	1 chief clerk	1 chief clerk
Gilliss, Charles J. Clerk, class three	2 clerks, class three	2 clerks, class three
Althouse, R. C. Clerk, class three	4 clerks, class two	4 clerks, class two
Tastet, W. F. Clerk, class two	1 artist	1 artist
Champney, Mary G. Clerk, class two	4 clerks, class one	4 clerks, class one
Colcord, Mabel Clerk, class two	5 clerks, at \$1,000 each	5 clerks, at \$1,000 each
Strauss, J. F. Clerk, class two	1 messenger	1 messenger
Wood, Elmer C. Clerk, class two	1 messenger	1 messenger
Howenstein, Lillian L. Artist, at \$1,400	1 laborer	1 laborer
Leister, A. J. Clerk, class one	2 charwomen, at \$480 each	2 charwomen, at \$480 each
Burch, Isabel Clerk, class one	1 charwoman	1 charwoman
Knab, Frederick Clerk, class one		
Marks, Jessie E. Clerk, class one		
Cunningham, Boyd C. Clerk, class one		
Sasser, E. R. Clerk, class one		
Vedder, Frank W. Clerk, class one		
Davison, Ferdinand D. Clerk, at \$1,000		
Meyers, W. Clarence Clerk, at \$1,000		
Vedder, Frank W. Clerk, at \$1,000		
Keleher, T. A. Clerk, at \$1,000		
Marshall, Margaret Clerk, at \$1,000		
Menagh, Charles S. Clerk, at \$1,000		
Reynolds, Bronte A. Clerk, at \$1,000		
Borochoff, Jacob M. Messenger, at \$840		
Fagan, George M. Messenger, at \$720		
Walker, S. Benson		
Total	Total amount of above appropriation (an increase over 1909 of \$3,120)	Total amount estimated
Unexpended balance		
Total amount of above appropriation		
The above force performed the following duties:		
Administrative and executive:	Administrative and executive:	Administrative and executive:
1 chief of bureau	1 chief of bureau	1 chief of bureau
1 chief clerk	1 chief clerk	1 chief clerk
Correspondence, files, and records:	Correspondence, files, and records:	Correspondence, files, and records:
2 clerks, class three	2 clerks, class three	2 clerks, class three
2 clerks, class two	2 clerks, class two	2 clerks, class two
2 clerks, class one	3 clerks, class one	3 clerks, class one
4 clerks, at \$1,000 each	4 clerks, at \$1,000 each	4 clerks, at \$1,000 each
Accounts and property:	Accounts and property:	Accounts and property:
1 clerk, class two	1 clerk, class two	1 clerk, class two
1 clerk, class one	1 clerk, class one	1 clerk, class one
Library:	Library:	Library:
1 clerk, class two	1 clerk, class two	1 clerk, class two
Illustrations:	Illustrations:	Illustrations:
1 artist	1 artist	1 artist
Editorial:	Editorial:	Editorial:
1 clerk	1 clerk	1 clerk
Messenger service:	Messenger service:	Messenger service:
1 messenger	1 messenger	1 messenger
1 messenger	1 messenger	1 messenger
Janitor and labor service:	Janitor and labor service:	Janitor and labor service:
1 laborer	1 laborer	1 laborer
2 charwomen, at \$480 each	2 charwomen, at \$480 each	2 charwomen, at \$480 each
1 charwoman	1 charwoman	1 charwoman
Entomological investigations, 1909, \$148,800.	Entomological investigations, 1910, \$198,400.	Entomological investigations, 1911, \$197,900.
Salaries:	Salaries:	Salaries:
In Washington	In Washington	In Washington
Out of Washington	Out of Washington	Out of Washington
Stationery	Stationery	Stationery
Miscellaneous supplies and services, equipment, books, machinery, etc.	Miscellaneous supplies and services, equipment, books, machinery, etc.	Miscellaneous supplies and services, equipment, books, machinery, etc.
Furniture	Furniture	Furniture
Fuel	Freight	Freight
Freight	Express	Express
Express	Telegraph	Telegraph
Telephone	Telephone	Telephone
Rent	Apparatus, instruments, and laboratory material	Apparatus, instruments, and laboratory material
Gas and electricity	Travel and field and station expenses	Travel and field and station expenses
Apparatus, instruments, and laboratory material		
Travel and field and station expenses		
Total expenditure to August 31, 1909		
Refunds, passenger transportation		
Total net expenditures to August 31, 1909		
Outstanding liabilities on August 31, 1909 (estimated)		
Balance to be turned back in Treasury (estimated)		
Total amount of above appropriation		

NOTE.—No change.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000.</i>	<i>Entomological investigations, 1910, \$198,400—Continued.</i>	<i>Entomological investigations, 1911, \$197,900—Continued.</i>
Salaries, out of Washington..... \$6,851.63		
Stationery..... 3.20		
Miscellaneous supplies and services, equipment, books, machinery, etc..... 80.00		
Rent..... 31.50		
Apparatus, instruments, and laboratory material..... 66.10		
Travel and station and field expenses..... 2,724.97		
Total expenditure..... 9,757.40		
Outstanding liabilities on August 31, 1909 (estimated)..... 142.60		
Balance to be turned back in Treasury (estimated)..... 100.00		
Total amount of above appropriation..... 10,000.00	Total amount of above appropriation (an increase over 1909 of \$39,600) .. \$198,400.00	Total amount estimated (a decrease from 1910 of \$500)..... \$197,900.00
Total of appropriations for 1909 and 1908-9 158,800.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Entomology. This work was divided into the following projects:		
PROJECTS.		
(1) Importation of useful insects. Under the head of this project efforts are being made, largely in Europe, to import the parasites of such injurious foreign insects as have become acclimatized in this country. The importation of the parasites of the gipsy moth and the brown-tail moth are considered under a separate project as a part of the special emergency appropriation to prevent the further spread of the gipsy moth and the brown-tail moth. Aside from this, specific efforts are being made in Europe to secure the parasites of the codling moth and large numbers of wintering cocoons of this insect are being sent from parts of Germany with the hope of rearing the parasites in this country and distributing them in American orchards. Efforts are also being made to import the recently discovered European parasites of the imported elm-leaf beetle from portions of France. In addition to these items search is still being made, as opportunity offers, for Central American parasites of the cotton boll weevil, and, by the help of correspondents, for Asiatic parasites of scale insects supposed to have been imported into this country. Importations are also being made from Europe of beneficial ladybird beetles that feed upon plant lice, since many of the American plant lice have been brought from Europe. Other beneficial insects are being searched for and imported where possible..... 3,500.00	(1) Importation of useful insects. This project is explained in column 1 of this sheet. Amount allotted..... 3,500.00	(1) Importation of useful insects. This project is explained in column 1 of this sheet. Amount estimated..... 3,500.00
(2) Forest insect investigations. The object of this line of work is to conduct original investigations on the subject of insect damage to standing timber and forest products, in order to determine the principal enemies, the character and extent of the problems which, on account of the losses involved, demand especial attention, and the more important facts in the life and habits of the destructive insects, local forest management, lumbering operations, beneficial insects, and other natural influences upon which to base conclusions and recommendations relating to practical methods of preventing losses. It has already been clearly demonstrated by the success of a number of efforts to control serious outbreaks that a large per cent of the losses caused by insect depredations on forests and forest products can be prevented through ordinary business management with little or no ultimate expenses to the owners or producers. The work has been well received and is being carried on actively. Many individual projects are under way in the course of this work, and promise much more than commensurate results..... 12,000.00	(2) Forest insect investigations. This project is explained in column 1 of this sheet. Amount allotted..... 12,000.00	(2) Forest insect investigations. This project is explained in column 1 of this sheet. Amount estimated..... 14,000.00
(3) Deciduous fruit insect investigations. Under this section of the work of the bureau the general subject of insects damaging deciduous fruits and vineyards in the United States has been carried on. Many individual projects are involved. Some of the most important of these have been considerably enlarged and additional ones have been undertaken. Field stations are maintained in regions largely devoted to fruit culture, and these stations are located so as to represent as great a range as possible of climatic conditions. Among the projects now in hand under this heading are investigations of the lime-sulfur-salt wash, codling moth investigations, pear thrips investigations, orange thrips investigations, plum curculio investigations, investigations of the grape-root worm and berry moth, and peach borer investigations. Together with these, many other fruit insects of less importance are being studied, and practical control work is being demonstrated in the field. The demand for further investigation of the pear thrips in California, and the grape-root worm and the grape-berry moth in the Great Lakes region is especially strong..... 25,500.00	(3) Deciduous fruit insect investigations. This project is explained in column 1 of this sheet. Amount allotted..... 23,600.00	(3) Deciduous fruit insect investigations. This project is explained in column 1 of this sheet. Amount estimated... 18,600.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Continued.</i>	<i>Entomological investigations, 1911, \$197,900—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(4) Investigations of insects injurious to truck crops and stored products. Owing to the widened scope of these investigations, and the increasing demand from truck growers all over the United States for information in regard to insect enemies, this work has been extended by the establishment of temporary field stations in the States of Florida, Texas, Mississippi, Virginia, and Colorado. A temporary field station has also been established in California for the study of insects affecting the sugar beet. An important project under this heading is that of insects affecting stored vegetables and animal products. These insects have been under observation for several years, but the life history of all are not yet thoroughly worked out, and further investigation is demanded. Extensive remedial experiments, especially with relation to hydrocyanic-acid gas, carbon bisulphid, and other fumigants, are now nearing completion..... \$11,250.00	(4) Investigations of insects injurious to truck crops and stored products. This project is explained in column 1 of this sheet. Amount allotted..... \$11,250.00	(4) Investigations of insects injurious to truck crops and stored products. This project is explained in column 1 of this sheet. Amount estimated..... \$11,250.00
(5) Cereal and forage insect investigations. This work has been actively followed for several years past and now covers nearly the entire United States. Extensive cooperative experiments have been carried on throughout the wheat-growing belt in regard to the Hessian fly. Important facts have been gained with regard to the remedial work, and most important discoveries have been made and are still being made in regard to the practical handling of the parasites of this destructive insect. The same may be said of joint worms, the so-called green bug, and other insects damaging winter wheat, as well as those attacking all other grains and forage crops. The savings to farmers in the case of the investigation of one insect alone are said by those financially interested to have amounted to over one million dollars in 1909..... 21,000.00	(5) Cereal and forage insect investigations. This project is explained in column 1 of this sheet. Amount allotted..... 21,000.00	(5) Cereal and forage insect investigations. This project is explained in column 1 of this sheet. Amount estimated... 25,000.00
(6) Scale insect investigations. Scale insects are among the chief depredators on both deciduous and nondeciduous fruits, and, owing to their close relationship and the similarity of means of control, form a special subject of investigation. This work includes a study of the life history of the insects, means of control artificially by insecticides or by gassing, and natural control by encouraging the multiplication of predaceous and parasitic enemies. In the case of deciduous fruits, the San Jose scale and oyster-shell bark louse and a score of other species of greater or less importance are constantly appearing in orchards previously noninfested, and the giving of special advice and directions as to the means of control is an important feature of the work of the bureau. The more important of these scale pests are under special investigation. This group contains a great many species closely related, some very dangerous and others much less so, and it is of the greatest importance to correctly determine the species in every case. This requires the maintenance of a large type collection which has become, in the course of years, the best collection in the world in this group of insects, and the bureau is looked to as the central source of information for determination for the experiment stations in the United States and for many foreign stations..... 5,000.00	(6) Scale insect investigations. This project is explained in column 1 of this sheet. Amount allotted..... 5,000.00	(6) Scale insect investigations. This project is explained in column 1 of this sheet. Amount estimated..... 5,000.00
(7) Investigation into the life history of ticks. Under the large emergency appropriation made to the Bureau of Animal Industry, work has been directed toward the eradication of the cattle tick throughout the South. Eradication measures, however, must be based upon a full knowledge of the life history of the cattle tick, and, while this life history is undoubtedly understood in a general way in fact, well enough understood so that the measures now undertaken by the Bureau of Animal Industry are proving effective—there are still points unascertained which may have, and undoubtedly will have, an important bearing in expediting the practical work; and it is investigations of this kind which have been undertaken by the Bureau of Animal Entomology under this project. Studies of the period in which cattle may be kept in tick-infested areas in the spring without danger of infestation from the seed ticks from eggs hatching when sufficient effective temperature has accumulated have resulted in the establishing of a law which will enable ranchers to determine this period exactly. As a result of careful studies of the incubation period and the longevity of the seed tick, the exact time required to free pastures or other inclosures from ticks, in case the cattle are removed, has been ascertained. The time required at different seasons to free cattle of ticks by placing in an inclosure from which the ticks had been eliminated by starvation or otherwise has also been shown, and studies are being made on the questions of the necessity of double fences, the importance of water courses in the dissemination of ticks, the restriction of the cattle tick to the cattle, and the question as to whether deer and horses and some other animals must be taken into consideration in the practical work of tick eradication are still under investigation. Especial studies have been and are being made of the life histories of other ticks, near relatives of	(7) Investigation into the life history of ticks. This project is explained in column 1 of this sheet. Amount allotted..... 6,500.00	(7) Investigation into the life history of ticks. This project is explained in column 1 of this sheet. Amount estimated... 6,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigation, 1910, \$198,400—Continued.</i>	<i>Entomological investigations, 1911, \$197,900—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
which have been found to carry certain diseases of other domestic animals in other countries, particularly in South Africa, and a beginning has been made of the study of the tick instrumental in the carriage of the spotted fever of human beings in the Northwest.....		
(8) Experimental work with insecticides. Enormous advances have been made in the knowledge of the use of insecticides for various insect pests during the last score of years, and their employment has become almost universal among the fruit and truck growers, and, in fact, in all the relations of insect pests to agriculture. The annual expenditure in the United States for insecticide materials and the cost of their application is enormous. The spraying of the apple alone probably costs upward of \$8,000,000 a year, on the basis of such treatment, for a little more than half of the producing trees. Most commercial orchards are sprayed now for the San Jose scale and other pests, and enormous expenditures are made annually in the case of truck crops. The experimental work of the bureau with insecticides is to determine the most efficient of these remedies and the most economical means of applying them, and to exploit the information gained by demonstrational work wherever such is needed. The experience of every year improves the methods and increases the efficiency. The field tests and demonstration work of the bureau with insecticides is divided up among the appropriate sections of the work of the bureau. In cooperation with the Bureau of Chemistry old and new arsenical and other mixtures are examined and tested to determine purity and utility. In the same way new proprietary insecticides which are being exploited in numbers every year are, whenever they show evidences of real value, subjected to field demonstration tests by this bureau, and made the subject of chemical examination by the Bureau of Chemistry.....	(8) Experimental work with insecticides. This project is explained in column 1 of this sheet. Amount allotted.....	(8) Experimental work with insecticides. This project is explained in column 1 of this sheet. Amount estimated....
\$6,500.00	\$3,000.00	\$3,000.00
(9) Investigation of insects in their direct relation to the health of man. Investigations have been continued of the distribution, life history, and remedies against mosquitoes that carry disease, especially the different mosquitoes of the genus <i>Anopheles</i> that have been proved to carry malaria, and the other species of the same genus that are inferentially supposed to have the same disease-bearing potentiality. Similar work has been done and is being done upon the distribution in this country of the yellow-fever mosquito. The house fly, the agency of which in the carriage of typhoid fever has been abundantly demonstrated, has been and will be studied on a large scale with reference to its destruction.....	(9) Investigation of insects in their direct relation to the health of man. This project is explained in column 1 of this sheet. Amount allotted.....	(9) Investigation of insects in their direct relation to the health of man. This project is explained in column 1 of this sheet. Amount estimated....
3,000.00	2,000.00	2,000.00
(10) Silk investigations. (No appropriation was made for silk investigations for the fiscal year 1909.)	(10) Silk investigations. (No appropriation was made for silk investigations for the fiscal year 1910.)	(10) Silk investigations. (No appropriation was made for silk investigations for the fiscal year 1911.)
2,000.00		
(11) Apicultural investigations. The main problem taken up in this work was an investigation of the brood diseases of bees. These diseases cause an annual direct loss to the bee keepers of the United States which is estimated at over \$2,000,000. This feature does not include the honey crop which is lost in the following year and successive years, nor does it take into consideration that many bee keepers are driven permanently out of the business in regions where the disease is epidemic. These diseases retard the progress in the industry and often wipe it out in limited regions. Since this subject was taken up, about a year and a half ago, six publications have been presented on various phases of the work of controlling these maladies. Careful bacteriological work as to the cause of the disease was necessary before the bacteria could be controlled in a systematic manner, and for the first time in the history of the bee-disease work the cause of one of the diseases has been definitely learned. This phase of the work is now being continued for the other diseases. Plans are now made for a large series of tests of the various methods of treatment which suggest themselves from the results of the bacteriological work. Work on bee paralysis, an obscure disease of adult bees which causes large losses in the warmer parts of the country, is being undertaken as rapidly as possible.	(11) Apicultural investigations. This project is explained in column 1 of this sheet. The work on bee diseases has been increased to include a study of the geographical distribution of the various maladies in the United States. The results of this study are being used in an effort to reach the bee keepers in regions where diseases exist to induce them to take the necessary steps to eradicate and control them. The work has been taken up on the structure and development of the honey bee. This was made necessary by the many inaccuracies which occur in the previously published accounts. Reliable information on these subjects is of great aid in devising practical manipulations. Detailed studies on various phases of bee activity have been undertaken since all practical manipulations depend directly on such knowledge. An effort is being made by these studies to arrive at a proper knowledge of the causes of various observed activities so that they may be utilized in practical manipulations. Detailed studies of bee keeping in certain localities have been taken up in three additional States since the first work done has been shown to be so beneficial. Amount allotted.....	(11) Apicultural investigations. This project is explained in columns 1 and 2 of this sheet. Amount estimated.....
10,000.00	10,000.00	10,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Con.</i>	<i>Entomological investigations, 1911, \$197,900—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. The bureau has practically completed its investigation of the cotton boll-worm and the remedies against it, but there are other insects injurious to cotton aside from the boll weevil and the bollworm, which almost annually damage the crop to a certain extent. These are cutworms, sharpshooters, and certain other species, notably the cotton-plant louse, which injures the young cotton plants in the spring. A study of these insects is being made by a field agent of the bureau, working in cooperation with the Texas State Agricultural Experiment Station. He has up to the present time obtained very promising results, and it is considered important that the investigation be continued.....	(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. This project is explained in column 1 of this sheet. Amount allotted..... \$2,000.00	(12) Investigations of insects affecting cotton other than the Mexican cotton boll weevil. This project is explained in column 1 of this sheet. Amount estimated..... \$2,000.00
(13) White-fly investigations. A complete study of the life history of the white fly in Florida as a basis for the the remedial work outlined as follows: A thorough investigation of the best means of controlling the white fly by fumigation with hydrocyanic-acid gas, involving experimental work to determine the best time, methods, and strength of gas, and demonstration work in orchards in different parts of the State to familiarize orange growers with the details of the process. Careful field tests of different insecticide washes which are available against the white fly and apparatus for their application. A thorough study of the three or four important fungous diseases of the white fly, with the object of determining, first, their efficiency, and, second, the best means of propagating them and encouraging their prompt development in white-fly infested orchards. A study of natural parasitic enemies of the white fly and related species, with the idea of introducing such parasites into Florida as show any likelihood of being efficient aids in the control of this pest.....	(13) White-fly investigations. The life-history work which has been in progress on the white fly in Florida has been substantially completed, and also the very important means of control by fumigation with hydrocyanic-acid gas. In connection with this gas it is very desirable to conduct during the next year further demonstration orchard tests in different parts of the State to thoroughly familiarize orange growers with the details of the process. There is now under way a thorough investigation of the means of control of the white fly with insecticide washes in the effort to find, if possible, a method of control which will be as effective and at the same time less expensive than the gas process. Demonstrations and field tests are to be conducted in different parts of the State with important insecticides and with apparatus for their application. The study of the three or four important fungous diseases of the white fly should be continued for at least another year to further determine their efficiency, best means of propagating and establishing them in white-fly infested orchards. There are no known parasites of the white fly in this country, and a search of such parasites in the probable native home of the pest in China is very desirable and fully warranted by the probable benefits which can be secured by introducing such parasites. An opportunity offers next year to make an attempt at the discovery and introduction of such natural enemies. Amount allotted..... 9,000.00	(13) White-fly investigations. This project is explained in column 2 of this sheet. Amount estimated..... 6,500.00
(14) Miscellaneous investigations and other work. Under the head of miscellaneous investigations and other work there are a number of insects of economic importance whose damage is not so great as that of those placed in the first class, which are constantly under observation and of which more or less extensive investigations are being made. For example, the subject of insects injurious to shade trees and ornamental plants has been under investigation for some years, with the idea of eventually publishing an extensive practical report on this subject. The circulars of information giving the results of investigations of individual pests of this class are now being published, and others are under way. Every year some new pest comes under this miscellaneous project. Emergencies arising under other projects are also supplied from this item of reserve from time to time as additional allotment seems necessary. The amount allotted covers traveling expenses, laboratory supplies, and the employment of temporary assistants in investigations of insects of this class.....	(14) Miscellaneous investigations and other work. This project is explained in column 1 of this sheet. Amount allotted..... 8,550.00	(14) Miscellaneous investigations and other work. This project is explained in column 1 of this sheet. Amount estimated 18,050.00
8,950.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Con.</i>	<i>Entomological investigations, 1911, \$197,900—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(15) Southern field-crop insect investigations. The special emergency appropriation for the cotton boll weevil, which covered a large part of the work under this section, was not made for the fiscal year 1909, but the investigations have been continued under the regular appropriation. The work during the summer of 1908 in the new regions that have recently been invaded by the cotton boll weevil indicate the absolute necessity for extensive laboratory and field work on this insect under the changed conditions. The work of the bureau in Louisiana and Mississippi has already excited much interest among the planters, and there is an urgent call for the establishment of a permanent laboratory in the delta region and field laboratories at other points. The problem of boll-weevil control becomes in many respects a different one in these regions, and the full knowledge of the life history and habits of the insect gained from equally careful work in the newly infested territory. There are insect enemies of other southern staple crops which need investigation, notably of sugar cane and rice. A competent investigation has been begun of the pests of these crops of considerable importance, as the sugar-cane borer, the sugar-cane rootworm, the water weevil of the rice crop, and others. Insects affecting tobacco in other parts of the South also come under this head, and with the widespread movement toward further diversification of crops in the South it is safe to predict that the changing of nature's balance will bring forward other insect injuries demanding investigation..... \$20,000.00	(15) Southern field-crop insect investigations. This project is explained in column 1 of this sheet. Amount allotted..... \$25,000.00	(15) Southern field-crop insect investigations. This project is explained in column 1 of this sheet. Amount estimated... \$17,500.00
(16) Hydrocyanic-acid gas investigations. Hydrocyanic-acid gas has been the chief means of controlling the principal scale insects of citrus fruit trees in California for many years. A large percentage of the commercial orchards in the State are fumigated every year, at a cost ranging from 25 cents to \$1.50 per tree, or a total annual expenditure of from \$1,500,000 to \$2,000,000, on the basis of the fumigation of 50 per cent of the trees every year. It becomes, therefore, a matter of very great importance to conduct the operation of fumigation in the most effective and economical manner. The work being done by the bureau on this subject in California is aimed to thoroughly standardize the process, and was undertaken in response to urgent demands from the horticultural commissioners of the principal fruit-producing counties of California and of many prominent growers..... 5,000.00	(16) Hydrocyanic-acid gas investigations. The use of this gas has been the chief means of controlling scale insects of citrus fruit trees in California for many years. During the last two years a thorough investigation of the subject has been in progress by the bureau in California. This investigation was undertaken in response to the demands from the horticultural commissioners of the principal fruit-producing counties of California and of many prominent growers. It has resulted in the introduction of decided improvements and a very large increase in efficiency, and the new and standardized methods have been very generally adopted in the principal citrus-growing regions of California. There remains to complete this investigation the need of some special experimental and demonstrational work in relation to some especially difficult scale-insect pests, and some collateral work with insecticides, particularly for the mealy bugs, which are more immune to the effect of gas than any other scale-insect pest. Amount allotted..... 5,000.00	(16) Hydrocyanic-acid gas investigations. This project is explained in column 2 of this sheet. Amount estimated... 5,000.00
(17) Investigation of insects affecting dried fruits. The restrictions of the Bureau of Chemistry, of this department, on the amount of sulphur permissible in such products has made necessary a thorough investigation of the subject to determine the exact influence of sulphuring on insect attack, while the fruit is drying and in storage, and to determine how infestation may be best avoided. A large number of samples of various classes of fruits have been collected both from drying trays out of doors and from bins where the fruit is stored, so that any possible insects infesting same might be bred out. A considerable series of insects has been thus secured and a study is being made of the life history and habits of same, as indicating how best to avoid infestation..... 2,500.00	(17) Investigation of insects affecting dried fruits. (This investigation was practically concluded at the close of the packing season of 1908. No allotment has been deemed necessary for its continuation.)	(17) Investigation of insects affecting dried fruits. This project is explained in column 2 of this sheet.
(18) Investigation of insects affecting tobacco. The investigation of insects affecting tobacco was begun in July, 1907. The work has been confined to that part of the dark-tobacco belt known as the Clarksville and Hopkinsville districts, which comprises 14 counties. In the spring of 1907 the tobacco flea-beetle, by its ravages upon young plants in the plant bed, reduced the average of tobacco fully 20 per cent, thereby entailing a loss of \$2,000,000. A cheap and efficient remedy has been found for this pest. The tobacco horn worm, upon the average, damages the tobacco crop not less than 10 per cent, an annual loss of \$1,000,000 or more. Paris green is used in dust form upon the plants as a remedy. But Paris green, while	(18) Investigation of insects affecting tobacco. The investigation of insects affecting tobacco was begun in July, 1907. It was at first confined to the dark-tobacco districts of Kentucky and Tennessee, but has been extended to cover all insects injurious to growing tobacco in the United States, as well as certain of those damaging cured tobacco in the warehouses and factories. Experiments in cultural control of	(18) Investigation of insects affecting tobacco. This project is explained in column 2 of this sheet. Amount estimated... 5,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Con.</i>	<i>Entomological investigations, 1911, \$197,900—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
reasonably effective, is somewhat caustic in its effects upon the plant and injures a great deal of tobacco. Other poisons are being tested to find an insecticide as effective upon tobacco worms, but without the caustic effect upon the plant. Manufacturers of insecticides are cooperating with the bureau, and two new insecticides will be tested in 1909.	certain of the tobacco insects have shown that a very large percentage of the hibernating stages may be killed in this way. Amount allotted..... \$5,000.00	
It has been found that fall plowing will destroy 39 per cent of the tobacco moths that would emerge the following year.		
In the dark-tobacco belt of Virginia a yearly loss to growers of tobacco of \$800,000 is caused by the "wireworm."		
The Virginia Experiment Station has requested the bureau to institute an investigation of this pest.		
In the shade-tobacco districts of Florida and Georgia the tobacco bud worm is a very severe pest. Tobacco injured by this insect is reduced in value to about half the price of uninjured tobacco.		
An investigation of the last two insects should be instituted immediately..... \$5,000.00		
(19) Insect-inspection work. The Department of Agriculture has become perhaps the largest importing agency in the United States for new plants and seeds. Much of this material comes from the quarters of the world which have never been explored entomologically and with which there has been very little exchange of plant material. All of this material is likely to harbor new insect pests, the introduction of which into the United States might work enormous losses to the existing fruit and other cultures. All such material is therefore most carefully inspected and thoroughly fumigated, and whenever any of it is infested with new enemies the destruction of which can not be assured it is destroyed outright. During the past year nearly a thousand lots of imported plants were inspected for injurious insects, the largest one of these containing over 5,000 plants. Many of these lots have been fumigated and others have been destroyed and all were given most careful examination. In the course of this work some pests, which threatened to be very important and dangerous, have been detected and destroyed.	(19) Insect-inspection work. This project is explained in column 1 of this sheet. In the absence of a general inspection law and of state laws in a few of the States the bureau has been obliged to do considerable inspection of European nursery stock destined for nonprotected States. Amount allotted..... 2,000.00	(19) Insect-inspection work. This project is explained in columns 1 and 2 of this sheet. Amount estimated..... \$2,000.00
Inspection is also made, by request of local nurserymen, of all material shipped from the District of Columbia to adjoining States, as, owing to the laws of these States, no material can pass their borders without a certificate of inspection. There is no law requiring such inspection by the department authorities, and it is extended as a necessary courtesy, since without it the local dealer would be practically limited to sales within the District. Comparatively little time, however, is required for this feature of the work, but the general inspection work of the bureau and the necessary examinations and studies of imported material which go without it occupy the larger portion of the time of two expert assistants..... 2,000.00		
(20) Cactus insect investigations. The extensive investigations carried on under the Bureau of Plant Industry concerning the practical use of certain species of cactus as forage have shown that the insect problem as connected with this new use of these plants is a serious one, and the Bureau of Entomology is earnestly requested by the Bureau of Plant Industry to take up this work. 2,500.00	(20) Cactus insect investigations. This project is explained in column 1 of this sheet. The work is nearly completed. Amount allotted..... 2,500.00	(20) Cactus insect investigations. This project is explained in columns 1 and 2 of this sheet. Amount estimated..... 2,000.00
	(21) Argentine ant investigations. The damage already done by an ant accidentally introduced into Louisiana, California, and possibly certain other States has increased to such a point as to demand investigation by the bureau. The investigations made by the officials of the States in question have as yet resulted in the discovery of no practical remedy. The insect is an agricultural and horticultural pest to stored foods and to households. It is enormously prolific and breeds under conditions that make it especially difficult to control. Amount allotted..... 4,000.00	(21) Argentine ant investigations. This project is explained in column 2 of this sheet. Amount estimated..... 4,000.00
	(22) Pear thrips investigations in California. This investigation, begun in 1907, should be considerably enlarged. The insect has greatly increased in destructiveness and has pread to the principal deciduous fruit sections in the San Francisco Bay region and during 1908 caused a loss of perhaps from one-half to three-fourths of a million dollars. Owing to the considerable di-	(22) Pear thrips investigations in California. By reason of the provision by Congress, this investigation was materially enlarged in 1908, work having been carried out in three different localities in the infested territory, representing essential differences in soil and irrigation conditions. Most gratifying progress has been made and effective methods of control have been determined, as

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Con.</i>	<i>Entomological investigations, 1911, \$197,900—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	<p>versity in conditions in the several fruit-growing valleys, it is highly desirable to make local studies in each of these and to carry out experiments and demonstrations in remedial work. Amount allotted. \$15,000.00</p>	<p>detailed in Bulletin 80, Part IV, of the Bureau of Entomology. Further investigations are needed to reduce control measures to the most economical basis possible consistent with efficiency, and to demonstrate to orchardists the necessity of the timely and thorough use of the recommended measures. Further local studies on the behavior of the insect are also necessary in view of the considerable variation in climatic and other considerations in the various valleys. Amount estimated. \$12,000.00</p>
	<p>(23) Cranberry-insect investigations in Wisconsin. The investigations of cranberry insects, begun in 1908, have shown the need of more extensive work, especially in Wisconsin, where conditions of culture require important changes in methods effective in eastern bogs. Insect losses to cranberries are very severe in the former section, and their control will require detailed information concerning their life and habits, and large-scale experiments with remedial measures, including work with sprays flowing with water and improvements in methods of growing and handling the crop. Amount allotted. 5,000.00</p>	<p>(23) Cranberry insect investigations. This work has been considerably enlarged during the season of 1909, additional important lines of work having been undertaken, including demonstrations in spraying in different cranberry marshes as a means of affording instruction to the growers. The assignment of an additional man to the work has made it possible to give needed attention to the life-history studies of the principal cranberry insects. It is desirable to continue this work in its present scope for another season. Amount estimated. 5,000.00</p>
	<p>(24) Damage to fruit trees by bark beetles following attack by the San Jose scale. The general presence of the San Jose scale in orchards, and the consequent weakening of many trees, has resulted in the attack of these by principally two species of bark beetles, which quickly bring about their death. This injury was very extensive in northern Ohio during 1908, and an investigation begun shows that there is great danger to our fruit interests from these pests under the conditions now obtaining in many orchards. Amount allotted. 2,500.00</p>	<p>(24) Damage to fruit trees by bark beetles following attack by the San Jose scale. This investigation, begun in the spring of 1908, in northern Ohio, in cooperation with the Ohio Agricultural Experiment Station, was continued during that season and a report issued on the year's work. Beginning in the spring of 1909 the Ohio station has been able to continue the work without assistance from this bureau, and the bureau's funds were used in the study of this and other fruit insects in different parts of the United States and in connection with other work at the several field stations. (No allotment has been deemed necessary for its continuation.)</p>
	<p>(25) Rice-insect investigations. The subject of insects that damage rice has not been handled by the entomological service of the Department of Agriculture since 1881. In the meantime rice culture has grown to considerable proportions in new localities, such as Texas and Louisiana, and has encountered new insect pests and variations in the habits of those already known. The amount of damage and the importance of the growing industry in new localities demand careful investigation of the insect problem in connection with this crop. Amount allotted. 5,000.00</p>	<p>(25) Rice-insect investigations. This project is explained in column 2 of this sheet. Amount estimated. 5,000.00</p>
	<p>(26) Sugar-cane insect investigations. The statement just made regarding rice-insect investigations holds in every detail for sugar-cane insects. No investigation made of this group of crop pests has been made by the Department of Agriculture since 1880, and the culture of this crop has extended in much the same way as has rice culture. This investigation seems to be urgent. Amount allotted. 5,000.00</p>	<p>(26) Sugar-cane insect investigations. This project is explained in column 2 of this sheet. Amount estimated. 5,000.00</p>

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Entomological investigations, 1908-9, \$10,000—Continued.</i>	<i>Entomological investigations, 1910, \$198,400—Con.</i>	<i>Entomological investigations, 1911, \$197,900—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(27) Investigation of the sources of infestation of stored grain. Investigations of the insects injurious to stored grain and especially the flour beetles, the Mediterranean flour moth, and other insects which injure flour for export, begun in 1893, and being continued with a much wider scope. Recently there has been a great demand for information as to the points of infestation of export flour through New Orleans, La., and Galveston, Tex. To determine this a series of very careful investigations is being undertaken, as the possibility exists of infestation at any one or more of the different places where the flour is made until it reaches the consumer. This is a vital question, as it affects our export trade, since many complaints are registered each year of serious damage to flour on its receipt in Europe and Africa. Other questions to be solved are to determine the best methods of fumigating all of the likely points of infestation, the mills, cars, vessels, ships, and warehouses. The gases in principal use are hydrocyanic-acid gas, bisulfid of carbon, and sulfur dioxide. Amount allotted..... \$5,000.00	(27) Investigation of the sources of infestation of stored grain. This project is explained in column 2 of this sheet. Amount estimated..... \$5,000.00
		(28) Orange-thrips investigations. For several years past orange growers in portions of California, especially in the Tulare district, have lost heavily by the work of the orange thrips causing a scabbing of the fruit, thus greatly lessening its market value. This insect has been the subject of investigation, in a preliminary way, in 1908, and more extensively in 1909. Considerable progress has been made in establishing a satisfactory treatment. However, its importance as an orange pest in the region mentioned, and its possible dissemination to other orange-growing sections of California, warrants as thorough an investigation as possible. The insect is already established and has been the cause of considerable injury in the orange-growing region of Arizona. Amount estimated..... 5,000.00
<i>Prevention of spread of moths, 1908-9, \$259,000.</i>	<i>Preventing spread of moths, 1910, \$309,000.</i>	<i>Preventing spread of moths, 1911, \$300,000.</i>
Salaries in Washington..... \$9,244.98	Salaries in Washington..... \$6,000.00	Salaries in Washington..... \$6,000.00
Salaries out of Washington (including unskilled labor)..... ^a 198,392.45	Salaries out of Washington (including unskilled labor)..... ^a 250,000.00	Salaries out of Washington (including unskilled labor)..... ^a 250,000.00
Stationery..... 129.56	Stationery..... 100.00	Stationery..... 100.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... ^b 12,077.60	Miscellaneous supplies and services, equipment, books, machinery, etc..... ^b 16,000.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... ^b 16,000.00
Furniture..... 67.63	Furniture..... 500.00	Furniture..... 500.00
Express..... 72.99	Express..... 200.00	Express..... 200.00
Telegraph..... 25.63	Telegraph..... 50.00	Telegraph..... 50.00
Telephone..... 179.49	Telephone..... 150.00	Telephone..... 150.00
Rent..... 859.92		
^a \$187,518.34 of this amount was paid for unskilled labor.	^a \$235,000 of this amount is being used in the employment of unskilled labor.	^a \$235,000 of this amount is to be used in the employment of unskilled labor.
^b This item includes large quantities of miscellaneous hardware, axes, bush hooks, and laborers' tools.	^b This item includes large quantities of miscellaneous hardware, axes, bush hooks, and laborers' tools.	^b This item includes large quantities of miscellaneous hardware, axes, bush hooks, and laborers' tools.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Entomology—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Prevention of spread of moths, 1908-9, \$250,000—Continued.</i>	<i>Preventing spread of moths, 1910, \$300,000—Con.</i>	<i>Preventing spread of moths, 1911, \$500,000—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Apparatus, instruments, and laboratory material..... ^a \$4,802.24	Rent..... \$1,000.00	Rent..... \$1,000.00
Travel and station and field expenses..... 5,980.71	Apparatus, instruments, and laboratory material..... ^a 16,000.00	Apparatus, instruments, and laboratory material..... ^a 16,000.00
Total expenditures to August 31, 1909..... 231,833.20	Travel and station and field expenses..... 10,000.00	Travel and station and field expenses..... 10,000.00
Outstanding liabilities on August 31, 1909 (estimated)..... 3,166.80		
Balance to be turned back in Treasury (estimated)..... 15,000.00		
Total amount of above appropriation..... 250,000.00	Total amount of above appropriation (an increase over 1909 of \$50,000).... 300,000.00	Total amount estimated (no increase over 1910)..... 300,000.00
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of preventing spread of moths. This work was divided into the following projects:	NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are being incurred in prosecuting the important work of preventing spread of moths. This work is divided into the following projects:	NOTE.—The above estimates of expenditures, classified in accordance with the suggestions of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of preventing spread of moths. This work will be divided into the following projects:
(1) Introduction of parasites from abroad and their care in this country. (The bulk of the expense attached to this parasite work is borne by the State of Massachusetts)..... 10,000.00	(1) This project is explained in column 1 of this sheet. Amount allotted..... 10,000.00	(1) This project is explained in column 1 of this sheet. Amount estimated..... 10,000.00
(2) Active measures for the destruction of the gipsy moth in newly infested territory and in limiting its spread. These measures for the most part are mechanical, necessitating the employment of a large force of unskilled laborers throughout the entire year..... 225,000.00	(2) This project is explained in column 1 of this sheet. Amount allotted..... 290,000.00	(2) This project is explained in column 1 of this sheet. Amount estimated..... 290,000.00
Total of all appropriations for Bureau of Entomology..... 434,960.00	Total of all appropriations for Bureau of Entomology (an increase over 1909 of \$92,720)..... 527,680.00	Total amount estimated for Bureau of Entomology (a decrease from 1910 of \$500)..... 527,180.00
Total expenditures to August 31, 1909..... 412,287.05		
Outstanding liabilities on August 31, 1909 (estimated)..... 5,439.05		
Balance to be turned back in Treasury (estimated)..... 17,233.90		
^a This item includes spraying machines and large quantities of insecticides for field use.	^a This item includes spraying machines and large quantities of insecticides for field use.	^a This item includes spraying machines and large quantities of insecticides for field use.

BUREAU OF BIOLOGICAL SURVEY.

Salaries, Bureau of Biological Survey, 1909, \$7,580.		
Merriam, C. Hart.....	Chief of bureau, at \$3,000.....	\$3,000.00
Thompson, F. J.....	Clerk, class one.....	1,200.00
Earnshaw, F. L.....	Clerk, at \$1,000.....	1,000.00
Milligan, C. B.....	Clerk, at \$1,000.....	1,000.00
Maxon, M. C.....	Clerk, at \$900.....	862.50
Loftin, Ella.....	Laborer, at \$480.....	480.00
Total.....		7,542.50
Unexpended balance.....		37.50
Total amount of above appropriation.....		7,580.00

The above force performed the following duties:

Administrative:	
1 chief of bureau.....	\$3,000.00
1 messenger or laborer.....	480.00
	3,480.00
Office files:	
1 clerk, class one.....	1,200.00
Correspondence:	
2 clerks, at \$1,000 each.....	2,000.00
1 clerk, at \$900.....	900.00
	2,900.00
	7,580.00

Salaries, Bureau of Biological Survey, 1910, \$13,000.		
1 biologist, who shall be chief of bureau.....		\$3,000.00
1 clerk, class four.....		1,800.00
1 clerk, class two.....		1,400.00
1 clerk, class one.....		1,200.00
2 clerks, at \$1,000 each.....		2,000.00
2 clerks, at \$900 each.....		1,800.00
1 messenger.....		720.00
1 messenger or laborer.....		480.00
1 laborer.....		600.00
Total amount of above appropriation (an increase over 1909 of \$5,420).....		13,000.00

The above force are performing the following duties:

Administrative:	
1 chief of bureau.....	\$3,000.00
1 clerk, class four.....	1,800.00
2 clerks, at \$900 each.....	1,800.00
1 messenger.....	720.00
1 messenger and laborer.....	480.00
1 laborer.....	600.00
	8,400.00
Office files:	
1 clerk, class two.....	1,400.00
Correspondence:	
1 clerk, class one.....	1,200.00
2 clerks, at \$1,000 each.....	2,000.00
	3,200.00
	13,000.00

Salaries, Bureau of Biological Survey, 1911, \$15,400.		
1 biologist, who shall be chief of bureau.....		\$3,000.00
1 clerk, class four.....		1,800.00
1 clerk, class two.....		1,400.00
1 clerk, class one.....		1,200.00
1 editorial clerk (by transfer from lump fund).....		1,200.00
1 photographer (by transfer from lump fund).....		1,200.00
2 clerks, at \$1,000 each.....		2,000.00
2 clerks, at \$900 each.....		1,800.00
1 messenger.....		720.00
1 messenger or laborer.....		480.00
1 laborer.....		600.00
Total amount estimated (an apparent increase over 1910 of \$2,400).....		15,400.00

NOTE.—One editorial clerk at \$1,200 and one photographer at \$1,200 have been added by transfer from the lump fund and that appropriation has been reduced accordingly. Net increase, \$2,400.

The above force will perform the following duties:

Administrative:	
1 chief of bureau.....	\$3,000.00
1 clerk, class four.....	1,800.00
1 editorial clerk.....	1,200.00
1 photographer.....	1,200.00
2 clerks, at \$900 each.....	1,800.00
1 messenger.....	720.00
1 messenger and laborer.....	480.00
1 laborer.....	600.00
	10,800.00
Office files:	
1 clerk, class two.....	1,400.00
Correspondence:	
1 clerk, class one.....	1,200.00
2 clerks, at \$1,000 each.....	2,000.00
	3,200.00
	15,400.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420.</i>	<i>Biological investigations, 1910, \$74,420.</i>	<i>Biological investigations, 1911, \$71,520.</i>
Salaries:	Salaries:	Salaries:
In Washington..... \$41,846.67	In Washington..... \$45,000.00	In Washington..... \$42,600.00
Out of Washington..... 570.53	Out of Washington..... 4,500.00	Out of Washington..... 4,500.00
Stationery..... 1,035.37	Stationery..... 700.00	Stationery..... 700.00
Miscellaneous supplies and services, equipment, etc..... 3,191.97	Miscellaneous supplies and services, equipment, etc..... 3,000.00	Miscellaneous supplies and services, equipment, etc..... 2,500.00
Furniture..... 518.11	Furniture..... 950.00	Furniture..... 900.00
Freight..... 38.62	Freight..... 150.00	Freight..... 150.00
Express..... 159.64	Express..... 350.00	Express..... 350.00
Telegraph..... 31.71	Telegraph..... 120.00	Telegraph..... 95.00
Telephone..... 34.80	Telephone..... 50.00	Telephone..... 125.00
Apparatus, instruments, and laboratory material..... 404.37	Apparatus, instruments, and laboratory material..... 600.00	Apparatus, instruments, and laboratory material..... 600.00
Travel and station and field expenses..... 5,651.53	Travel and station and field expenses..... 19,000.00	Travel and station and field expenses..... 19,000.00
Total expenditures to August 31, 1909..... 53,483.32	Total amount of above appropriation (an increase over 1909 of \$20,000)..... 74,420.00	Total amount estimated (a decrease from 1910 of \$2,900)..... 71,520.00
Outstanding liabilities on August 31, 1909 (estimated)..... 886.68		
Balance to be turned back in Treasury (estimated)..... 50.00		
Total amount of above appropriation..... 54,420.00		
<p>NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary in prosecuting the important work of the Bureau of Biological Survey. This work fell naturally under the following projects:</p>		
PROJECTS.		
(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge):	(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge):	(1) Preparation of reports and maps relating to life and crop zones (Dr. C. Hart Merriam, chief, in charge):
Amount expended..... 6,727.00	Amount allotted..... 7,000.00	Amount estimated..... 7,000.00
This project includes the preparation of maps and reports relating to life and crop zones of the several States and Territories, and the country as a whole; also maps showing the distribution of our native birds and mammals. These maps serve as guides in selecting crops; in locating areas inhabited by the various beneficial and noxious animals; and in framing legislation for the protection of beneficial species, including game birds and mammals.		
(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge):	(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge):	(2) Biological survey of California (Dr. C. Hart Merriam, chief, in charge):
Amount expended..... 494.30	Amount allotted..... 3,000.00	Amount estimated..... 3,000.00
Objects same as in Project 1.		
(3) Biological survey of New Mexico (Vernon Bailey, assistant in charge of Geographic Distribution, in charge):	(3) Biological survey of New Mexico (Vernon Bailey, assistant in charge of Biological Investigations, in charge):	
Amount expended..... 4,242.38	Amount allotted..... 1,200.00	
For the purpose of gathering material for maps and reports on the life and crop zones of this territory, similar in scope to Projects 1 and 2.	This project is expected to be completed during the fiscal year 1910.	
(4) Biological survey of Colorado (Merritt Cary, assistant, in charge):	(4) Biological survey of Colorado (Merritt Cary, assistant, in charge):	
Amount expended..... 452.81	Amount allotted..... 1,200.00	
Objects as in Projects 1, 2, and 3.	This project is expected to be completed during the fiscal year 1910.	
(8) Biological survey of Alaska:	(8) Biological survey of Alaska:	(8) Biological survey of Alaska:
No expenditure.	No allotment.	No estimate.
Includes study of the distribution of birds, mammals, and plants for the preparation of reports and maps showing the life zones of the Territory. Also study of abundance, distribution, and habits of game birds and mammals in connection with the establishment of game refuges and collection of information relative to the raising of fur-bearing mammals for profit, and data on which laws for the protection of game in that region may be based.		
(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):	(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):	(9) Investigations of the food habits of birds (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):
Amount expended..... 3,349.00	Amount allotted..... 3,000.00	Amount estimated..... 3,000.00
The work chiefly includes laboratory investigations of bird stomachs and preparation of records and office files concerning the food of native birds in order to publish such information for the benefit of farmers and fruit growers. In this manner the beneficial and injurious species may be distinguished and means taken to protect the useful birds and minimize the injury from the harmful kinds.		

There is a decrease in the above appropriation of \$2,900, as follows: One editorial clerk, at \$1,200, and one photographer, at \$1,200, have been transferred to the statutory roll, and \$500 is transferred to the contingent fund for mechanical shop work.

NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Bureau of Biological Survey. This work will fall naturally under the following projects:

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420—Continued.</i>	<i>Biological investigations, 1910, \$74,420—Cont'd.</i>	<i>Biological investigations, 1911, \$71,520—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(10) Investigations into the relations of birds to the cotton-boll weevil (A. H. Howell, assistant biologist, in charge): Amount expended..... \$303.42 The purpose of this project is to learn what kinds of birds feed upon the boll weevil, with a view to the protection of such birds by law. Also to devise means for the extension of the range and increase in the numbers of these useful kinds in parts of the cotton belt where they are scarce or wanting. Reports of progress are published and distributed in the cotton-growing areas.	(10) Investigations into the relations of birds to the cotton-boll weevil (A. H. Howell, assistant biologist, in charge): Amount allotted..... \$500.00	(10) Investigations into the relations of birds to the cotton-boll weevil (A. H. Howell, assistant biologist, in charge): Amount estimated..... \$1,000.00
(11) Investigation into the food habits of California birds (F. E. L. Beal, assistant in charge of Economic Ornithology, in charge): Amount expended..... 600.00 This field investigation is for the purpose of learning what California birds feed on fruit, the amount of damage they do, and to what extent the damage is offset by the destruction of injurious insects. Also to devise methods of protecting orchards from injury by birds. Final reports are being prepared for publication.	(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): Amount allotted..... 400.00	(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): Amount estimated..... 400.00
(13) Investigation of the food of land game birds of the United States (W. L. McAtee, assistant biologist, in charge): No expenditure. Investigations are conducted to determine the relations of game birds to agriculture, their usefulness in destroying noxious insects and weed seeds, aside from their value as food.	(14) Investigation of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): Amount expended..... 933.00 The object of this work is to secure accurate knowledge concerning the food and food habits of wild ducks, geese, and other waterfowl as an aid to the preservation of these valuable birds and the stocking of ponds and waterways from which they are now absent. Also to furnish information as a basis for protective legislation.	(14) Investigation of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): Amount estimated..... 800.00
(14) Investigation of the food of aquatic game birds (W. L. McAtee, assistant biologist, in charge): Amount expended..... 933.00 The object of this work is to secure accurate knowledge concerning the food and food habits of wild ducks, geese, and other waterfowl as an aid to the preservation of these valuable birds and the stocking of ponds and waterways from which they are now absent. Also to furnish information as a basis for protective legislation.	(16) Investigation into the migration of birds (Prof. W. W. Cooke, migration expert, in charge): Amount expended..... 928.00 The work consists mainly in compilation of data on the times and routes of migration of American birds, such knowledge furnishing a basis for protective legislation and for open and close seasons. The observations on which this work are based is largely furnished by voluntary and unpaid observers in many parts of the United States.	(16) Investigation into the migration of birds (Prof. W. W. Cooke, migration expert, in charge): Amount estimated..... 1,400.00
(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Amount expended..... 3,131.64 This covers the administration and routine work, together with general investigations of the relations to agriculture of wild mammals, especially rodents and carnivores.	(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Amount allotted..... 2,000.00	(17) Investigation into the relations of mammals to agriculture (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge): Amount estimated..... 3,000.00
(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge): Amount expended..... 915.00 The object of this work is to prevent (under act of Congress) the introduction into the United States of injurious birds and mammals.	(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge): Amount allotted..... 1,300.00	(19) Supervision over the importation of foreign mammals, birds, and birds' eggs (Henry Oldys, assistant biologist, in charge): Amount estimated..... 1,300.00
(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount expended..... 2,900.00 The compilation, publication, and distribution of information concerning game laws, interstate commerce in game, and concerning the value, preservation, and propagation of game and nongame birds.	(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount allotted..... 2,400.00	(20) Publication of information concerning game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount estimated..... 2,400.00
(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount expended..... 1,307.74 To secure enforcement of the Lacey Act and regulations concerning the interstate shipment of game, including cooperation with state game wardens and United States marshals. Evidence of violations of the federal game laws are transmitted to the Department of Justice and to state officials, and expert testimony given when necessary.	(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount allotted..... 3,000.00	(21) Protection of game and birds (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge): Amount estimated..... 3,300.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420—Continued.</i>	<i>Biological investigations, 1910, \$74,420—Cont'd.</i>	<i>Biological investigations, 1911, \$71,520—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):	(22) Supervision of bird and game reservations and game refuges (Dr. T. S. Palmer, assistant in charge of Game Preservation, in charge):
Amount expended..... \$114.50	Amount allotted..... \$3,000.00	Amount estimated..... \$3,000.00
The Biological Survey is charged with the oversight of areas set apart by presidential proclamation of act of Congress as breeding refuges for birds and game mammals in danger of extinction.		
(24) Destruction of ground squirrels in Washington, Oregon, and Idaho, including study of bacterial diseases (S. E. Piper, scientific assistant, in charge):	(24) Destruction of ground squirrels in Washington, Oregon, and Idaho, including study of bacterial diseases (S. E. Piper, scientific assistant, in charge):	
Amount expended..... 518.00	Amount allotted..... 700.00	
To discover by field investigation the best and cheapest method by which the farmers of the Northwestern States can protect grain and other crops from ground squirrels. Both field and laboratory work are necessary.	This project is expected to be completed during the fiscal year 1910.	
(25) Inquiry into the relation of wolves to stock raising (Vernon Bailey, assistant in charge of Geographic Distribution, in charge):	(25) Inquiry into the relation of wolves to stock raising (Vernon Bailey, assistant in charge of Biological Investigations, in charge):	(25) Inquiry into the relations of wolves to stock raising (Vernon Bailey, assistant in charge of Biological Investigations, in charge):
No expenditure.	Amount allotted..... 1,000.00	Amount estimated..... 500.00
Field investigations into the extent of the damage to range stock from wolves, including study of the breeding and other habits, with a view to discovering the best methods of protection. Includes experiments with wire fencing.		
(26) Study of fox farming (W. H. Osgood, assistant biologist, in charge):	(26) Study of fox farming:	(26) Study of fox farming:
No expenditure.	No allotment.	No estimate.
Preliminary investigations in this new and promising industry have resulted in the publication of a report which has aroused much interest. Further field work along much the same lines will be done with a view to the collection of data which will place the industry on a practical working basis.		
(27) Inquiry into the relation of wild geese to the grain crop of California (Dr. A. K. Fisher, assistant in charge of Economic Investigations, in charge):		
No expenditure.		
To collect information on the damage done to the grain crop of California by the wild geese wintering there, with an effort to devise methods for lessening the loss to farmers.		
(28) Expenses for administration, including contingent and miscellaneous expenses, labor, and other general expenditures in Washington (Dr. C. Hart Merriam, chief, in charge):	(28) Expenses for administration, including contingent and miscellaneous expenses, labor, and other general expenditures in Washington (Dr. C. Hart Merriam, chief, in charge):	(28) Expenses for administration, including contingent and miscellaneous expenses, labor, and other general expenditures in Washington (Dr. C. Hart Merriam, chief, in charge):
Amount expended..... 12,604.00	Amount allotted..... 15,000.00	Amount estimated..... 18,000.00
(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(29) Field work in eastern United States in relation to birds and small fruits (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):
No expenditure.	Amount allotted..... 350.00	Amount estimated..... 300.00
A field study of the food habits of birds which eat cultivated fruits in the eastern United States, with the object of discovering methods of reducing the losses to the fruit growers from this source.		
(30) Investigation of the plague of field mice in Nevada (S. E. Piper, scientific assistant, in charge):		
Amount expended..... 373.00		
During the year swarms of field mice destroyed extensive alfalfa fields in Nevada. The owners applied to the Biological Survey for assistance and an assistant was at once sent to Lovelocks, Nev., the center of the trouble. After a series of experiments a successful method of exterminating these pests by poison was discovered and put into effect.		
Completed with fiscal year 1909.		
(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(31) Relation of woodpeckers to forestry and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):
Amount expended..... 950.00	Amount allotted..... 200.00	Amount estimated..... 200.00
This work consists of field and laboratory investigations of the food and habits of woodpeckers, with special reference to their relations to the important subject of forest preservation.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420—Continued.</i>	<i>Biological investigations, 1910, \$74,420—Cont'd.</i>	<i>Biological investigations, 1911, \$71,520—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(32) Extermination of the English sparrow in southern California (Dr. T. S. Palmer, in charge of Game Preservation, in charge):	(32) Extermination of the English sparrow in southern California (Dr. T. S. Palmer, in charge of Game Preservation, in charge):	(32) Extermination of the English sparrow in southern California (Dr. T. S. Palmer, in charge of Game Preservation, in charge):
Amount expended..... \$112.50	Amount allotted..... \$500.00	Amount estimated..... \$500.00
Cooperation with the local authorities of the counties in southern California to prevent the further spread of the English sparrow in that region and to exterminate the colonies of these pests which have already gained a foothold.		
(33) Supervision of national bison herd in Montana (Dr. C. Hart Merriam, chief, in charge):	(33) Supervision of national bison herd in Montana (Dr. C. Hart Merriam, chief, in charge):	(33) Supervision of national bison herd in Montana (Dr. C. Hart Merriam, chief, in charge):
Amount expended..... 294.65	Amount allotted..... 3,000.00	Amount estimated..... 3,000.00
The purchase and fencing of a buffalo range in Montana was authorized by Congress in 1908, and the supervision of this range and the buffalo herd has been placed in charge of the Biological Survey.		
(34) Gophers in relation to agriculture (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):	(34) Gophers in relation to agriculture (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):	(34) Gophers in relation to agriculture (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):
Amount expended..... 286.67	Amount allotted..... 500.00	Amount estimated..... 500.00
The object of this project is to learn the distribution of these extremely destructive mammals and the amount of damage done to agriculture by them. Experiments are conducted to determine the cheapest and most effective method of destroying them.		
(35) Introduction and rearing of imported pheasants (Henry Oldys, assistant biologist, in charge):	(35) Introduction and rearing of imported pheasants (Henry Oldys, assistant biologist, in charge):	(35) Introduction and rearing of imported pheasants (Henry Oldys, assistant biologist, in charge):
Amount expended..... 600.00	Amount allotted..... 100.00	Amount estimated..... 100.00
The object of this project is to gather information for a bulletin on the introduction, present distribution in the United States, and best methods of rearing imported pheasants for game preserves and aviaries.		
(36) Biological survey of Utah (W. H. Osgood, assistant biologist, in charge):	(36) Biological survey of Utah:	(36) Biological survey of Utah:
Amount expended..... 1,228.99	Amount allotted..... 2,000.00	Amount estimated..... 1,500.00
A survey of the natural life areas of the State for the purpose of preparing reports and maps showing the life and crop zones as a guide to the farmers in selecting crops. Objects same as in Projects 1 and 2.		
(37) Biological reconnaissance of parts of Virginia, Tennessee, Georgia, Alabama, Mississippi, North Carolina, Kentucky, and Louisiana (A. H. Howell, assistant biologist, in charge):	(37) Biological reconnaissance of parts of Virginia, Tennessee, Georgia, Alabama, Mississippi, North Carolina, Kentucky, Louisiana, and Florida (A. H. Howell, assistant biologist, in charge):	(37) Biological reconnaissance of parts of Virginia, Tennessee, Georgia, Alabama, Mississippi, North Carolina, Kentucky, Louisiana, and Florida (A. H. Howell, assistant biologist, in charge):
Amount expended..... 1,563.86	No allotment.	Amount estimated..... 1,500.00
(38) Destruction of ground squirrels in California (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):	(38) Destruction of ground squirrels in California (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):	(38) Destruction of ground squirrels in California (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):
Amount expended..... 881.84	Amount allotted..... 2,500.00	Amount estimated..... 2,500.00
Experimental and demonstration work in destroying California ground squirrels, always serious enemies of agriculture and recently discovered to be carriers of plague.		
(39) Field mice investigations (S. E. Piper, scientific assistant in charge):	(39) Field mice investigations (S. E. Piper, scientific assistant, in charge):	(39) Field mice investigations (S. E. Piper, scientific assistant, in charge):
Amount expended..... 116.00	Amount allotted..... 400.00	Amount estimated..... 400.00
Investigations, experiments, and demonstration work for the purpose of reducing to a minimum the recurrence of mouse plagues with accompanying serious losses.		
	(40) Relation of rabbits to agriculture:	(40) Relation of rabbits to agriculture:
	Amount allotted..... 500.00	Amount estimated..... 500.00
	In large areas of the United States rabbits are extremely destructive to crops, nurseries, and fruit trees. The habits and distribution of the various species are being studied in order to devise effective methods for their destruction. Effort is being made to secure cultures of the diseases which periodically attack rabbits and practically exterminate them over wide areas.	
	(41) Investigation of the English starling (Dr. T. S. Palmer, in charge of Game Preservation, in charge):	(41) Investigation of the English starling (Dr. T. S. Palmer, in charge of Game Preservation, in charge):
	Amount allotted..... 100.00	Amount estimated..... 100.00
	The introduction several years ago of the English startling into the eastern United States and its subsequent increase and spread threatens the country with another bird pest unless prompt measures for its restriction are undertaken. It is proposed to investigate the	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420—Continued.</i>	<i>Biological investigations, 1910, \$74,420—Cont'd.</i>	<i>Biological investigations, 1911, \$71,520—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	matter thoroughly in order to learn the present distribution, abundance, and habits of the species in this country, so that means may be found for destroying the pests before they become too numerous.	
	(42) Experimental and demonstration work in destroying ground squirrels, field mice, and other noxious mammals in the national forests, game preserves, and elsewhere:	(42) Experimental and demonstration work in destroying ground squirrels, field mice, and other noxious mammals in the national forests, game preserves, and elsewhere:
	Amount allotted..... \$5,000.00	Amount estimated..... \$5,000.00
	The national forests, national parks, and bird reservations are infested with numerous mammals which are extremely destructive to nursery and forest trees, pasture, and other vegetation, and largely reduce the value and revenue from these sources. Hence the need of a thorough study of these pests. In addition to destroying them on the public domain it is planned to demonstrate to those interested the most effective means of controlling these mammals.	
	(43) Field study of the birds of Oregon and Washington in relation to fruit growing and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):	(43) Field study of the birds of Oregon and Washington in relation to fruit growing and agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge):
	Amount allotted..... 2,500.00	Amount estimated..... 1,000.00
	A field study of the food habits of birds in the rapidly developing fruit-growing region of the extreme Northwest is necessary in order to supply the fruit growers with needed information for the protection of their crops.	
	(44) Biological survey of Arizona (Vernon Bailey, in charge of Biological Investigations, in charge):	(44) Biological survey of Arizona (Vernon Bailey, in charge of Biological Investigations, in charge):
	Amount allotted..... 2,000.00	Amount estimated..... 1,000.00
	A survey of the Territory for the purpose of publishing maps and reports on the natural distribution of animal and plant life and natural crop zones and areas. This work will serve as the basis for intelligent crop selection in newly opening sections of the irrigable areas.	
	(45) Biological survey of Oregon and Washington (Dr. C. Hart Merriam, chief in charge):	(45) Biological survey of Oregon and Washington (Dr. C. Hart Merriam, chief, in charge):
	Amount allotted..... 1,000.00	Amount estimated..... 500.00
	Object same as Nos. 2 and 3.	
(46) Destruction of house rats (D. E. Lantz, assistant, in charge):	(46) Destruction of house rats (D. E. Lantz, assistant, in charge):	(46) Destruction of house rats (D. E. Lantz, assistant, in charge):
Amount expended..... \$805.00	Amount allotted..... 800.00	Amount estimated..... 500.00
To devise means for the destruction or control of these noxious rodents, which not only cause enormous annual losses, but are known to be the main disseminators of the plague and other diseases.		
(47) Deer farming in the United States (D. E. Lantz, assistant, in charge):	(47) Deer farming in the United States (D. E. Lantz, assistant, in charge):	(47) Deer farming in the United States (D. E. Lantz, assistant, in charge):
Amount expended..... 400.00	No allotment.	No estimate.
To learn the best and most profitable methods of raising deer and elk in captivity for market, thus turning to profit much brushy and other now unproductive land.		
	(48) Breeding fur-bearing animals (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):	(48) Breeding fur-bearing animals (Dr. A. K. Fisher, in charge of Economic Investigations, in charge):
	No allotment.	No estimate.
	Experiments in breeding fur-bearing animals for profit (mink, martin, fisher, and beaver).	
	(49) Investigating food habits of moles (D. E. Lantz, assistant biologist, in charge):	(49) Investigating food habits of moles (D. E. Lantz, assistant biologist, in charge):
	Amount allotted..... 600.00	Amount estimated..... 50.00
	To ascertain definitely the economic status of the mole by investigation of its food habits and the discovery of methods of controlling its depredations.	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Biological Survey—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Biological investigations, 1909, \$54,420—Continued.</i>	<i>Biological investigations, 1910, \$74,420—Cont'd.</i>	<i>Biological investigations, 1911, \$71,520—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
	(50) Food of flycatchers (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Amount allotted..... \$500.00 To investigate the food habits of of the members of the group with reference to their economic status.	(50) Food of flycatchers (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Amount estimated..... \$300.00
	(51) Food, distribution, and migration of wading birds (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): Amount allotted..... 500.00 To investigate the distribution and migration routes of the waders with reference to protective legislation and the establishment of open and close seasons.	(51) Food, distribution, and migration of wading birds (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): Amount estimated..... 100.00
	(52) Food of swallows in relation to agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Amount allotted..... 200.00 To study the food of this group with reference to their exact economic status.	(52) Food of swallows in relation to agriculture (Prof. F. E. L. Beal, in charge of Economic Ornithology, in charge): Amount estimated..... 200.00
	(53) Protection of embankments and irrigation ditches from burrowing animals (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): Amount allotted..... 500.00 To discover and demonstrate to engineers, farmers, and others concerned cheap and effective methods of destroying dike borers, like gophers, muskrats, and others.	(53) Protection of embankments and irrigation ditches from burrowing animals (Dr. A. K. Fisher, in charge of Economic Investigations, in charge): Amount estimated..... 500.00
(54) Miscellaneous investigations: Amount expended..... \$7,236.70 Includes minor subjects of economic importance and emergency cases not otherwise provided for.	(54) Miscellaneous investigations: Amount allotted..... 3,470.00	(54) Miscellaneous investigations: Amount estimated..... 3,170.00
Total of all appropriations for Bureau of Biological Survey..... 62,000.00	Total of all appropriations for Bureau of Biological Survey (an increase over 1909 of \$25,420)..... 87,420.00	Total amount estimated for Bureau of Biological Survey (a decrease from 1910 of \$500)..... 86,920.00
Total expenditures to August 31, 1909..... 61,025.82		
Outstanding liabilities on August 31, 1909 (estimated)..... 886.68		
Balance to be turned back in Treasury (estimated)..... 87.50		

DIVISION OF ACCOUNTS AND DISBURSEMENTS.

<i>Salaries, Division of Accounts and Disbursements, 1909, \$46,690.</i>	<i>Salaries, Division of Accounts and Disbursements, 1910, \$61,490.</i>	<i>Salaries, Division of Accounts and Disbursements, 1911, \$61,490.</i>
Zappone, A..... Chief of division and disbursing clerk, at \$3,250..... \$3,250.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department..... \$3,250.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department..... \$3,250.00
Calvert, E. B..... Assistant chief of division, at \$2,500..... 2,500.00	1 assistant chief of division..... 2,500.00	1 assistant chief of division..... 2,500.00
Yerby, E. D..... Auditor, at \$2,000..... 2,000.00	2 auditors, at \$2,000 each..... 4,000.00	2 auditors, at \$2,000 each..... 4,000.00
Fagan, M. E..... Cashier and chief clerk, at \$2,000..... 2,000.00	1 cashier and chief clerk..... 2,000.00	1 cashier and chief clerk..... 2,000.00
Smith, A. W..... Clerk, class four..... 1,800.00	3 clerks, class four..... 5,400.00	3 clerks, class four..... 5,400.00
Cox, F. C..... Clerk, class three..... 1,600.00	7 clerks, class three..... 11,200.00	7 clerks, class three..... 11,200.00
Forbes, E. E..... Clerk, class three..... 1,600.00	10 clerks, class two..... 14,000.00	10 clerks, class two..... 14,000.00
Jones, W. W..... Clerk, class three..... 1,600.00	8 clerks, class one..... 9,600.00	8 clerks, class one..... 9,600.00
Legge, F. W..... Clerk, class three..... 1,600.00	3 clerks, at \$1,000 each..... 3,000.00	3 clerks, at \$1,000 each..... 3,000.00
Montgomery, Anna..... Clerk, class three..... 1,600.00	1 clerk..... 900.00	1 clerk..... 900.00
Nevius, W. J..... Clerk, class two..... 1,400.00	2 clerks, at \$840 each..... 1,680.00	2 clerks, at \$840 each..... 1,680.00
Gould, E. D..... Clerk, class two..... 1,400.00	3 clerks, at \$720 each..... 2,160.00	3 clerks, at \$720 each..... 2,160.00
Harrington, L. F..... Clerk, class two..... 1,400.00	1 custodian of records and files..... 1,200.00	1 custodian of records and files..... 1,200.00
Hubbard, N. S. B..... Clerk, class two..... 1,400.00	1 messenger..... 600.00	1 messenger..... 600.00
McCutchen, M..... Clerk, class two..... 1,400.00		
Quinn, P. H..... Clerk, class two..... 1,400.00	Total amount of above appropriation (an increase over 1909 of \$14,800)..... 61,490.00	Total amount estimated..... 61,490.00
Shuck, W. L..... Clerk, class two..... 1,400.00		
Teller, D. A..... Clerk, class two..... 1,400.00		
Wagner, F. H..... Clerk, class two..... 1,400.00		
Cunningham, S. H..... Clerk, class one..... 1,200.00		
Dodson, B. M..... Clerk, class one..... 1,200.00		
Haskell, Sadia..... Clerk, class one..... 1,200.00		
Springer, J. F..... Clerk, class one..... 1,200.00		
Dykes, J. W..... Clerk, at \$1,000..... 1,000.00		
Handy, R. B., jr..... Clerk, at \$1,000..... 1,000.00		
Martin, F. R..... Clerk, at \$1,000..... 1,000.00		
Downs, N. L..... Clerk, at \$900..... 485.00		
Louirim, J. D..... Clerk, at \$840..... 375.00		
Cooksey, H. B..... Clerk, at \$840..... 840.00		
Medley, T. C..... Clerk, at \$840..... 840.00		
De Loss, M. W..... Clerk, at \$720..... 450.00		
Sexton, M. A..... Clerk, at \$720..... 270.00		

NOTE.—No change.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Division of Accounts and Disbursements—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Division of Accounts and Disbursements, 1909, \$48,690—Con.</i>	<i>Salaries, Division of Accounts and Disbursements, 1910, \$61,490—Continued.</i>	<i>Salaries, Division of Accounts and Disbursements, 1911, \$61,490—Continued.</i>
Hess, M. H. Clerk, at \$720. \$720.00		
McNaught, A., jr. Clerk, at \$720. 720.00		
Murray, W. A. Custodian of records and files, at \$1,200. 1,200.00		
Tomlin, R. M. Messenger, at \$600. 600.00		
Walker, S. Benson. 526.67		
Total. 46,646.67		
Unexpended balance. 43.33		
Total amount of above appropriation. 46,690.00		
The above force performed the following duties:	The above force are performing the following duties:	The above force will perform the following duties:
Administration:	Administration:	Administration:
1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00	1 chief of division and disbursing clerk, who shall be administrative officer of the fiscal affairs of the department. \$3,250.00
1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00	1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00	1 assistant chief of division (in charge of the Weather Bureau branch). 2,500.00
1 custodian of records and files. 1,200.00	1 custodian of records and files. 1,200.00	1 custodian of records and files. 1,200.00
1 clerk, class one. 1,200.00	1 clerk, class one. 1,200.00	1 clerk, class one. 1,200.00
1 messenger. 600.00	1 messenger. 600.00	1 messenger. 600.00
8,750.00	9,650.00	9,650.00
NOTE.—On June 30, 1908, for the purpose of systematizing its work, the division was divided into six sections, as follows:		
Cashier's section:	Cashier's section:	Cashier's section:
(This section prepares and mails all checks and handles all moneys received and disbursed.)	(This section prepares and mails all checks and handles all moneys received and disbursed.)	(This section prepares and mails all checks and handles all moneys received and disbursed.)
1 cashier and chief clerk (in charge of cashier's section in addition to his administrative duties as chief clerk of the division). \$2,000.00	1 cashier and chief clerk (in charge of cashier's section in addition to his administrative duties as chief clerk of the division). 2,000.00	1 cashier and chief clerk (in charge of cashier's section in addition to his administrative duties as chief clerk of the division). 2,000.00
1 clerk, class three. 1,600.00	1 clerk, class three. 1,600.00	1 clerk, class three. 1,600.00
3 clerks, class two. 4,200.00	4 clerks, class two. 5,600.00	4 clerks, class two. 5,600.00
1 clerk, class one. 1,200.00	1 clerk. 720.00	1 clerk. 720.00
9,000.00	9,920.00	9,920.00
Auditing section A:	Auditing section A:	Auditing section A:
(This section audits all salary and reimbursement accounts.)	(This section audits all salary and reimbursement accounts.)	(This section audits all salary and reimbursement accounts.)
1 auditor. \$2,000.00	1 auditor. 2,000.00	1 auditor. 2,000.00
1 clerk, class three. 1,600.00	3 clerks, class three. 4,800.00	3 clerks, class three. 4,800.00
2 clerks, class two. 2,800.00	2 clerks, class one. 2,400.00	2 clerks, class one. 2,400.00
1 clerk, class one. 1,200.00	9,200.00	9,200.00
7,600.00		
Auditing section B:	Auditing section B:	Auditing section B:
(This section audits all purchase, telegraph, and express accounts; also all accounts of the board of consulting scientific experts.)	(This section audits all purchase, telegraph, and express accounts; also all accounts of the board of consulting scientific experts.)	(This section audits all purchase, telegraph, and express accounts; also all accounts of the board of consulting scientific experts.)
1 clerk, class four. \$1,800.00	1 auditor. 2,000.00	1 auditor. 2,000.00
1 clerk, class three. 1,600.00	2 clerks, class three. 3,200.00	2 clerks, class three. 3,200.00
3 clerks, class two. 4,200.00	3 clerks, class two. 4,200.00	3 clerks, class two. 4,200.00
1 clerk. 840.00	1 clerk. 840.00	1 clerk. 840.00
8,440.00	10,240.00	10,240.00
Bookkeeper's section:	Bookkeeper's section:	Bookkeeper's section:
(This section keeps all books pertaining to the fiscal affairs of the department, prepares all requisitions on the Treasury for advances of public funds, indexes all accounts, and has charge of the correspondence with the accounting officers of the Treasury in the settlement of accounts.)	(This section keeps all books pertaining to the fiscal affairs of the department, prepares all requisitions on the Treasury for advances of public funds, indexes all accounts, and has charge of the correspondence with the accounting officers of the Treasury in the settlement of accounts.)	(This section keeps all books pertaining to the fiscal affairs of the department, prepares all requisitions on the Treasury for advances of public funds, indexes all accounts, and has charge of the correspondence with the accounting officers of the Treasury in the settlement of accounts.)
1 clerk, class three. \$1,600.00	1 clerk, class four. 1,800.00	1 clerk, class four. 1,800.00
1 clerk, class two. 1,400.00	1 clerk, class three. 1,600.00	1 clerk, class three. 1,600.00
2 clerks, at \$1,000. 2,000.00	1 clerk, class two. 1,400.00	1 clerk, class two. 1,400.00
2 clerks, at \$840. 1,680.00	1 clerk, class one. 1,200.00	1 clerk, class one. 1,200.00
2 clerks, at \$720. 1,440.00	2 clerks, at \$1,000. 2,000.00	2 clerks, at \$1,000. 2,000.00
8,120.00	1 clerk. 840.00	1 clerk. 840.00
	2 clerks, at \$720. 1,440.00	2 clerks, at \$720. 1,440.00
	10,280.00	10,280.00
Miscellaneous section:	Miscellaneous section:	Miscellaneous section:
(This section has charge of the preparation of the several annual reports to Congress and the audit and administrative examination of the accounts and disbursements of the Forest Service.)	(This section has charge of the preparation of the several annual reports to Congress and the audit and administrative examination of the accounts and disbursements of the Forest Service.)	(This section has charge of the preparation of the several annual reports to Congress and the audit and administrative examination of the accounts and disbursements of the Forest Service.)
1 clerk, class three. \$1,600.00	1 clerk, class four. 1,800.00	1 clerk, class four. 1,800.00
1 clerk, class one. 1,200.00	2 clerks, class two. 2,800.00	2 clerks, class two. 2,800.00
1 clerk. 900.00	2 clerks, class one. 2,400.00	2 clerks, class one. 2,400.00
3,700.00	7,000.00	7,000.00
Freight and transportation section:	Freight and transportation section:	Freight and transportation section:
(This section audits all freight accounts and prepares and issues all bills of lading and passenger and freight transportation requests.)	(This section audits all freight accounts and prepares and issues all bills of lading and passenger and freight transportation requests.)	(This section audits all freight accounts and prepares and issues all bills of lading and passenger and freight transportation requests.)
1 clerk, class three. \$1,600.00	1 clerk, class four. \$1,800.00	1 clerk, class four. \$1,800.00
1 clerk, class one. 1,200.00	2 clerks, class one. 2,400.00	2 clerks, class one. 2,400.00
1 clerk. 1,000.00	1 clerk. 1,000.00	1 clerk. 1,000.00
1 clerk. 720.00	1 clerk. 840.00	1 clerk. 840.00
4,520.00	6,040.00	6,040.00
50,130.00	62,330.00	62,330.00
NOTE.—Of the above, 1 clerk of class two, 1 clerk of class one, and 1 clerk at \$840 were detailed from the office of the Secretary; in all. 3,440.00	NOTE.—Of the above, 1 clerk at \$840 is detailed from the office of the Secretary. 840.00	NOTE.—Of the above, 1 clerk at \$840 will be detailed from the office of the Secretary. 840.00
46,690.00	61,490.00	61,490.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

DIVISION OF PUBLICATIONS.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.		Estimated expenditures for the fiscal year ending June 30, 1911.	
<i>Salaries, Division of Publications, 1909, \$139,710.</i>		<i>Salaries, Division of Publications, 1910, \$173,450.</i>		<i>Salaries, Division of Publications, 1911, \$172,730.</i>	
Arnold, Joseph A.	Editor and chief of division, at \$3,000.	\$1,250.00	1 editor, who shall be chief of division.....	\$3,000.00	1 editor, who shall be chief of division.....
Hill, George William.	Editor and assistant chief, at \$2,250.	1,458.33	1 editor, who shall be assistant chief of division.....	2,250.00	1 editor, who shall be assistant chief of division.....
Arnold, Joseph A.	Associate editor, at \$2,000.	1,312.50	1 chief clerk.....	2,000.00	1 chief clerk.....
Stallings, B. D.	Assistant in charge of indexing, at \$1,800.	937.50	1 associate editor.....	2,000.00	1 associate editor.....
Hill, George William.	Assistant editor, at 1,600.	833.34	4 assistant editors, at \$1,600 each.....	6,400.00	4 assistant editors, at \$1,600 each.....
Stallings, B. D.	Assistant editor, at \$1,600.	1,166.66	2 assistant editors, at \$1,400 each.....	2,800.00	2 assistant editors, at \$1,400 each.....
Greathouse, C. H.	Assistant editor, at \$1,600.	1,800.00	1 assistant in charge of indexing.....	1,800.00	1 assistant in charge of indexing.....
Cornman, Ephraim.	Assistant editor, at \$1,600.	1,600.00	1 indexer.....	1,400.00	1 indexer.....
Harding, W. F.	Assistant editor, at \$1,600.	1,591.11	1 assistant in charge of illustrations.....	2,000.00	1 assistant in charge of illustrations.....
Kennedy, G. W.	Assistant editor, at \$1,600.	1,600.00	1 draftsman or photographer.....	1,500.00	1 draftsman or photographer.....
Thornton, S. Edwin.	Editorial clerk, at \$1,400.	1,466.66	2 draftsmen or photographers, at \$1,400 each.....	2,800.00	2 draftsmen or photographers, at \$1,400 each.....
Carter, Delos M.	Editorial clerk, at \$1,400.	1,400.00	1 draftsman or photographer.....	1,200.00	1 draftsman or photographer, at \$1,200 each (in lieu of 1 draftsman or photographer at \$1,200 and 5 photographers at \$1,200 each).....
Searles, Stanley.	Assistant in charge of illustrations, at \$2,000.	2,000.00	5 photographers, at \$1,200 each.....	6,000.00	1 assistant photographer.....
Williams, L. S.	Draftsman or photographer, at \$1,500.	1,500.00	1 assistant photographer.....	840.00	1 assistant in charge of document section.....
Boettcher, A. B.	Draftsman or photographer, at \$1,400.	933.33	1 assistant in charge of document section.....	1,600.00	1 foreman, miscellaneous distribution.....
Blanchard, F. W. S.	Draftsman or photographer, at \$1,400.	466.67	1 foreman, miscellaneous distribution.....	1,500.00	1 foreman, farmers' bulletin distribution.....
Stevenson, J. H.	Draftsman or photographer, at \$1,400.	1,400.00	1 foreman, farmers' bulletin distribution.....	1,200.00	1 forewoman.....
Beeson, Loring W.	Draftsman or photographer, at \$1,200.	400.00	1 forewoman.....	1,400.00	1 clerk, class one.....
Olzewski, Leopold.	Chief clerk, at \$2,000.	750.00	1 clerk, class one.....	1,200.00	1 clerk, class two.....
Mudd, A. I.	Clerk, class one.....	2,000.00	5 clerks, class one.....	6,000.00	10 clerks, at \$1,000 each.....
Bracey, C. E.	Clerk, class one.....	1,200.00	10 clerks, at \$900 each.....	9,000.00	25 clerks, at \$840 each.....
Chapman, Harriet B.	Clerk, class one.....	1,200.00	32 clerks, at \$720 each.....	23,040.00	1 chief folder.....
Clark, Blanche B.	Clerk, class one.....	1,200.00	1 folder.....	900.00	3 folders, at \$840 each.....
Nichols, I. J.	Clerk, class one.....	1,156.67	2 skilled laborers, at \$900 each.....	1,800.00	15 skilled laborers, at \$840 each.....
Stoddard, M. C.	Clerk, class one.....	1,160.00	15 skilled laborers, at \$840 each.....	12,600.00	15 skilled laborers, at \$780 each.....
Goodchild, M. A.	Clerk, at \$1,000.	811.11	19 skilled laborers, at \$720 each.....	13,680.00	2 messengers, at \$840 each.....
Kammerer, M. M.	Clerk, at \$1,000.	125.00	2 messengers, at \$720 each.....	2,880.00	3 messengers, at \$600 each.....
Lawson, Laura B.	Clerk, at \$1,000.	1,000.00	3 messengers, at \$480 each.....	1,440.00	2 messengers, at \$360 each.....
Merriam, Lucy R.	Clerk, at \$1,000.	1,000.00	1 fireman.....	720.00	2 laborers, at \$660 each.....
Murray, Anne R.	Clerk, at \$1,000.	1,000.00	3 charwomen, at \$480 each.....	1,440.00	4 charwomen, at \$240 each.....
Plant, Catherine T.	Clerk, at \$1,000.	1,000.00	4 charwomen, at \$240 each.....	960.00	
Smith, Mary A. E.	Clerk, at \$1,000.	1,000.00			
Tull, Ava J.	Assistant in charge of document section, at \$2,000.	2,000.00			
Handy, R. B.	Assistant in document section, at \$1,600.	1,600.00			
Cleary, Francis J. P.	Assistant in document section, at \$1,400.	1,400.00			
Riley, John O.	Foreman in document section, at \$1,400.	1,400.00			
Hendrix, J. H.	Foreman farmers' bulletin distribution, at \$1,200.	1,200.00			
Walter, H. S.	Foreman, at \$1,200.	1,200.00			
Edwards, M. E.	Forewoman, at \$1,200.	1,200.00			
Thorn, M. E.	Chief folder, at \$1,000.	1,000.00			
Lawlor, L. D.	Folder, at \$900.	900.00			
King, George W.	Folder, at \$840.	840.00			
Buckley, Margaret.	Folder, at \$840.	840.00			
Quinn, Maggie.	Clerk, at \$900.	900.00			
Gordon, Wm.	Clerk, at \$900.	900.00			
Parker, Annie.	Clerk, at \$900.	900.00			
Duke, Annie L.	Clerk, at \$900.	900.00			
Mosely, Maggie M.	Clerk, at \$840.	840.00			
Myer, Alice.	Clerk, at \$840.	840.00			
Bane, Philena M.	Clerk, at \$840.	840.00			
Burlingame, Sarah A.	Clerk, at \$840.	840.00			
Daniels, M. A.	Clerk, at \$840.	837.67			
Drayton, Hester E.	Clerk, at \$840.	840.00			
Dunford, Annie.	Clerk, at \$840.	840.00			
Galloway, Maude P.	Clerk, at \$840.	840.00			
Haas, C. B.	Clerk, at \$840.	840.00			
Hayes, Rose A.	Clerk, at \$840.	837.67			
Kammerer, M. M.	Clerk, at \$840.	163.33			
Whittemore, Sarah A.	Clerk, at \$840.	674.33			
Moore, E. D.	Clerk, at \$840.	840.00			
Nelson, Ella M.	Clerk, at \$840.	840.00			
Penfield, Cora A.	Clerk, at \$840.	840.00			
Price, Almira.	Clerk, at \$840.	840.00			
Roe, Ida M. B.	Clerk, at \$840.	840.00			
Saunders, Catherine.	Clerk, at \$840.	837.67			
Thode, Joachim.	Clerk, at \$840.	840.00			
Armstrong, Marion.	Clerk, at \$720.	720.00			
Barber, Fannie C.	Clerk, at \$720.	720.00			
Bowman, Grace L.	Clerk, at \$720.	502.00			
Senseney, Ethel D.	Clerk, at \$720.	150.00			
Buffington, B. C.	Clerk, at \$720.	720.00			
Carraway, Lucie C.	Clerk, at \$720.	720.00			
Chase, Florence A.	Clerk, at \$720.	610.00			
Hurd, Eva.	Clerk, at \$720.	108.00			
Connor, Julia A.	Clerk, at \$720.	720.00			
Derbyshire, Florence E.	Clerk, at \$720.	270.00			
Van Kirk, Lucy H.	Clerk, at \$720.	450.00			
Drennon, Lou E.	Clerk, at \$720.	330.00			
Johnson, Willette M.	Clerk, at \$720.	390.00			
Espita, Mamie.	Clerk, at \$720.	704.00			
Gardner, Lucy A.	Clerk, at \$720.	720.00			
Goldsmith, Bennie H.	Clerk, at \$720.	530.00			
Wulfert, M. A.	Clerk, at \$720.	180.00			
Kammerer, M. M.	Clerk, at \$720.	490.00			
McCargar, Gertrude.	Clerk, at \$720.	140.00			
Willson, A. R.	Clerk, at \$720.	78.00			
King, Minnesota J.	Clerk, at \$720.	720.00			
McCormick, M. C.	Clerk, at \$720.	150.00			
Willson, A. R.	Clerk, at \$720.	358.00			
Mulholland, M. B.	Clerk, at \$720.	720.00			
			Total amount of above appropriation (an increase over 1909 of \$33,740).....		173,450.00
			Total amount estimated (a decrease over 1910 of \$720).....		172,730.00
			NOTE.—One draftsman or photographer at \$1,200 and 5 photographers at \$1,200 each have been consolidated under one title for the purpose of reducing the number of grades. One fireman at \$720 has also been transferred to the Secretary's roll. Net decrease, \$720.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i>	<i>Salaries, Division of Publications, 1910, \$175,450—Continued.</i>	<i>Salaries, Division of Publications, 1911, \$172,730—Continued.</i>
Owens, Maud..... Clerk, at \$720.....	\$720.00	
Parker, Grace D..... Clerk, at \$720.....	614.00	
Powell, Emily..... Clerk, at \$720.....	720.00	
Rahn, M. B..... Clerk, at \$720.....	640.00	
Reece, Viola E..... Clerk, at \$720.....	720.00	
Rice, Nellie..... Clerk, at \$720.....	720.00	
Rumbaugh, Bessie G..... Clerk, at \$720.....	720.00	
Sullivan, Helen C..... Clerk, at \$720.....	720.00	
Taylor, A. Robina..... Clerk, at \$720.....	720.00	
Thompson, Augusta H..... Clerk, at \$720.....	720.00	
Wheelan, F. M..... Clerk, at \$720.....	652.00	
Wood, Sadie S..... Clerk, at \$720.....	720.00	
Wright, M. H..... Clerk, at \$720.....	696.00	
Adams, Jacob.....	158.33	
Gedney, Sarah E..... Clerk, at \$600.....	90.00	
Sobotka, Mamie D.....	300.00	
Allyn, A. M..... Clerk, at \$600.....	568.33	
Anderson, Charles E.....	150.00	
Coe, Sallie A. B..... Clerk, at \$600.....	75.00	
Kidwell, Ben.....	50.00	
Pitkin, Rosetta.....	300.00	
Calnan, Katherine..... Clerk, at \$600.....	375.00	
Warren, Belle D.....	225.00	
Coleman, E. H..... Clerk, at \$600.....	325.00	
Johnson, Willette M.....	275.00	
Dooley, Kate..... Clerk, at \$600.....	573.33	
Filder, Zuluka.....	50.00	
Fenton, Sallie B..... Clerk, at \$600.....	375.00	
Westlake, Beulah E.....	175.00	
Gibbs, Geneva..... Clerk, at \$600.....	600.00	
Hemingway, Mary K..... Clerk, at \$600.....	600.00	
Hurd, Eva..... Clerk, at \$600.....	485.00	
Rynex, Byrd E.....	91.67	
Hyatt, Helen..... Clerk, at \$600.....	81.67	
Whetstone, T. E.....	485.00	
Kenyon, G. G..... Clerk, at \$600.....	582.49	
McCargar, Gertrude..... Clerk, at \$600.....	483.33	
Steely, Edna W.....	115.00	
McNerhany, Ida..... Clerk, at \$600.....	563.33	
Mack, Ella S..... Clerk, at \$600.....	598.33	
Melling, May A..... Clerk, at \$600.....	341.67	
Urner, Mary N.....	258.33	
Miller, S. J..... Clerk, at \$600.....	600.00	
Parkinson, Gertrude E..... Clerk, at \$600.....	600.00	
Pickrell, Nina..... Clerk, at \$600.....	573.33	
Rozelle, Keith K.....	16.67	
Spalding, Katherine O..... Clerk, at \$600.....	600.00	
Sutton, Virginia..... Clerk, at \$600.....	600.00	
Clime, Winfield S.....	783.33	
Currie, William..... Photographer, at \$1,200.....	400.00	
Bullock, Julia E..... Assistant photographer, at \$840.....	840.00	
Fowler, Lorena C..... Skilled laborer, at \$840.....	840.00	
Griffin, Milton R..... Skilled laborer, at \$840.....	840.00	
Martin, Elmer L..... Skilled laborer, at \$840.....	247.33	
Towers, C. W.....	592.67	
Peck, Gulad E..... Skilled laborer, at \$840.....	840.00	
Pfunder, William..... Skilled laborer, at \$840.....	840.00	
Phillips, C. E..... Skilled laborer, at \$840.....	840.00	
Poff, Matt..... Skilled laborer, at \$840.....	840.00	
Smith, Ida G..... Skilled laborer, at \$840.....	840.00	
Wanstall, Harriet A..... Skilled laborer, at \$840.....	834.17	
Young, Wm. H..... Skilled laborer, at \$840.....	840.00	
Apperson, M. L..... Skilled laborer, at \$720.....	714.00	
Gill, A. B..... Skilled laborer, at \$720.....	720.00	
Lieutaud, Louise G..... Skilled laborer, at \$720.....	660.00	
Martin, Elmer L..... Skilled laborer, at \$720.....	500.00	
Towers, C. W.....	212.00	
Roby, Hattie..... Skilled laborer, at \$720.....	720.00	
Turner, Amelia..... Skilled laborer, at \$720.....	720.00	
Vrooman, Minnie..... Skilled laborer, at \$720.....	720.00	
Williams, H. H..... Skilled laborer, at \$720.....	720.00	
Augur, Laura..... Skilled laborer, at \$600.....	591.66	
Bailey, Charles G. G..... Skilled laborer, at \$600.....	425.00	
Goldsmith, Bennie H.....	158.33	
Barber, George T..... Skilled laborer, at \$600.....	600.00	
Basehoar, Luther H..... Skilled laborer, at \$600.....	600.00	
Danforth, L. V..... Skilled laborer, at \$600.....	600.00	
Duvall, Helen L.....	83.34	
Garlinger, Anna M..... Skilled laborer, at \$600.....	95.00	
Keating, C. G.....	300.00	
Ford, Frank M..... Skilled laborer, at \$600.....	600.00	
Freeman, E. H. C.....	101.67	
Locke, Louisa K..... Skilled laborer, at \$600.....	91.67	
Noak, Louisa.....	210.00	
Rynex, Byrd E.....	93.33	
Hoey, Jennie G..... Skilled laborer, at \$600.....	600.00	
Laird, E. A..... Skilled laborer, at \$600.....	575.00	
Lee, Augustus..... Skilled laborer, at \$600.....	600.00	
Lewis, Ida J..... Skilled laborer, at \$600.....	600.00	
MacFate, Joseph W..... Skilled laborer, at \$600.....	600.00	
McGrath, Gerald G..... Skilled laborer, at \$600.....	600.00	
McNamara, Mary..... Skilled laborer, at \$600.....	600.00	
Moore, Laurence W..... Skilled laborer at \$600.....	369.16	
Twomey, John M.....	225.00	
Posey, Kate..... Skilled laborer, at \$600.....	596.67	
Reuter, Joseph N..... Skilled laborer, at \$600.....	600.00	
Trudeau, E. L..... Skilled laborer, at \$600.....	600.00	
Wilson, John J..... Skilled laborer, at \$600.....	600.00	
Munro, James.....	770.00	
Payne, Charles E..... Messenger, at \$840.....	49.00	

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i>	<i>Salaries, Division of Publications, 1910, \$175,450—Continued.</i>	<i>Salaries, Division of Publications, 1911, \$172,730—Continued.</i>
Barbour, Wm. H. Messenger, at \$720..... \$720.00		
Jones, Veister S. Messenger, at \$720..... 720.00		
Quinn, Maggie Messenger, at \$720..... 690.00		
Carter, Joseph C. Messenger, at \$600..... 555.00		
Long, Michael Messenger, at \$600..... 600.00		
Mee, Homer Messenger, at \$600..... 600.00		
Bailey, Charles G. G. Messenger, at \$420..... 122.50		
Cullinan, Thos. L. Messenger, at \$420..... 297.50		
Bailey, William H. Messenger, at \$420..... 261.33		
Donnelly, William F. Messenger, at \$420..... 46.67		
Moore, Laurence W. Messenger, at \$420..... 88.67		
Bailey, William H. Messenger boy, at \$360..... 136.00		
Gordon, Chas. N. Messenger boy, at \$360..... 222.00		
Angelo, Frank M. Fireman, at \$720..... 720.00		
Total..... 137,710.37		
Unexpended balance..... 1,999.63		
Total amount of above appropriation..... 139,710.00		
The above force performed the following duties:	The above force is performing the following duties:	The above force will perform the following duties:
Administration:	Administration:	Administration:
1 editor, who shall be chief of division..... \$3,000.00	1 editor, who shall be chief of division..... \$3,000.00	1 editor, who shall be chief of division..... \$3,000.00
1 editor, who shall be assistant chief of division..... 2,250.00	1 chief clerk..... 2,000.00	1 chief clerk..... 2,000.00
1 chief clerk..... 2,000.00	2 clerks, class one..... 2,400.00	2 clerks, class one..... 2,400.00
1 clerk, class one..... 1,200.00	1 clerk..... 900.00	1 clerk..... 1,000.00
1 clerk..... 1,000.00	1 clerk..... 720.00	1 clerk..... 900.00
2 clerks, at \$840 each..... 1,680.00	1 messenger..... 720.00	1 clerk..... 720.00
1 skilled laborer..... 600.00	1 messenger..... 600.00	1 messenger..... 720.00
	1 charwoman..... 480.00	1 messenger..... 600.00
		1 charwoman..... 480.00
	\$10,820.00	\$11,820.00
Correspondence and files:	Correspondence and files:	Correspondence and files:
1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00	1 clerk, class one..... 1,200.00
2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
1 clerk..... 900.00	3 clerks, at \$900 each..... 2,700.00	3 clerks, at \$900 each..... 2,700.00
4 clerks, at \$840 each..... 3,360.00	5 clerks, at \$840 each..... 4,200.00	5 clerks, at \$840 each..... 4,200.00
7 clerks, at \$720 each..... 5,040.00	8 clerks, at \$720 each..... 5,760.00	8 clerks, at \$720 each..... 5,760.00
3 clerks, at \$600 each..... 1,800.00	1 messenger..... 600.00	1 messenger..... 600.00
1 folder..... 900.00		
1 skilled laborer..... 840.00		
	16,460.00	16,460.00
Editing and abstracting:	Editing and abstracting:	Editing and abstracting:
1 associate editor..... 2,000.00	1 editor, who shall be assistant chief of division..... 2,250.00	1 editor, who shall be assistant chief of division..... 2,250.00
4 assistant editors, at \$1,600 each..... 6,400.00	1 associate editor..... 2,000.00	1 associate editor..... 2,000.00
2 editorial clerks, at \$1,400 each..... 2,800.00	4 assistant editors, at \$1,600 each..... 6,400.00	4 assistant editors, at \$1,600 each..... 6,400.00
1 clerk..... 840.00	2 assistant editors, at \$1,400 each..... 2,800.00	2 assistant editors, at \$1,400 each..... 2,800.00
	1 clerk..... 900.00	2 clerks, at \$900 each..... 1,800.00
	1 messenger..... 480.00	1 messenger..... 480.00
	1 messenger..... 360.00	1 messenger..... 360.00
	15,190.00	16,090.00
Illustrating:	Illustrating:	Illustrating:
1 assistant in charge of illustrations..... 2,000.00	1 assistant in charge of illustrations..... 2,000.00	1 assistant in charge of illustrations..... 2,000.00
1 draftsman or photographer..... 1,500.00	1 draftsman..... 1,500.00	1 draftsman..... 1,500.00
2 draftsmen or photographers, at \$1,400 each..... 2,800.00	1 draftsman..... 1,400.00	1 draftsman..... 1,400.00
1 draftsman or photographer..... 1,200.00	1 draftsman..... 1,200.00	1 draftsman..... 1,200.00
1 clerk, class one..... 1,200.00	1 photographer..... 1,400.00	1 photographer..... 1,400.00
1 clerk..... 840.00	5 photographers, at \$1,200 each..... 6,000.00	5 photographers, at \$1,200 each..... 6,000.00
1 clerk..... 720.00	1 assistant photographer..... 840.00	1 assistant photographer..... 840.00
1 photographer..... 1,200.00	1 clerk..... 1,000.00	1 clerk..... 1,000.00
1 assistant photographer..... 840.00	1 clerk..... 840.00	1 clerk..... 840.00
1 messenger boy..... 360.00	1 skilled laborer..... 780.00	1 skilled laborer..... 780.00
	1 skilled laborer..... 720.00	1 skilled laborer..... 720.00
	1 messenger..... 480.00	1 messenger..... 480.00
	1 charwoman..... 480.00	1 charwoman..... 480.00
	1 charwoman..... 240.00	1 charwoman..... 240.00
	18,880.00	18,880.00
Indexing:	Indexing:	Indexing:
1 assistant in charge of indexing..... 1,800.00	1 assistant in charge of indexing..... 1,800.00	1 assistant in charge of indexing..... 1,800.00
2 clerks, at \$1,000 each..... 2,000.00	1 indexer..... 1,400.00	1 indexer..... 1,400.00
3 clerks, at \$720 each..... 2,160.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
1 clerk..... 600.00	2 clerks, at \$840 each..... 1,680.00	2 clerks, at \$840 each..... 1,680.00
	3 clerks, at \$720 each..... 2,160.00	3 clerks, at \$720 each..... 2,160.00
	1 messenger..... 600.00	1 messenger..... 600.00
	9,640.00	9,640.00
Distributing documents:	Distributing documents:	Distributing documents:
1 assistant in charge of document section..... 2,000.00	1 assistant in charge of document section..... 2,000.00	1 assistant in charge of document section..... 2,000.00
1 assistant in document section..... 1,600.00	1 assistant, document section..... 1,600.00	1 assistant, document section..... 1,600.00
1 assistant in document section..... 1,400.00	1 foreman, miscellaneous distribution..... 1,500.00	1 foreman, miscellaneous distribution..... 1,500.00
1 foreman, document section..... 1,400.00	1 foreman, farmers' bulletin distribution..... 1,200.00	1 foreman, farmers' bulletin distribution..... 1,200.00
1 foreman, farmers' bulletin distribution..... 1,200.00	1 forewoman..... 1,400.00	1 forewoman..... 1,400.00
2 forewomen, at \$1,200 each..... 2,400.00	1 forewoman..... 1,200.00	1 forewoman..... 1,200.00
2 clerks, class one..... 2,400.00	1 clerk, class two..... 1,400.00	1 clerk, class two..... 1,400.00
2 clerks, at \$1,000 each..... 2,000.00		
1 chief folder..... 1,000.00		
3 folders, at \$840 each..... 2,520.00		
2 clerks, at \$900 each..... 1,800.00		
8 clerks, at \$840 each..... 6,720.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Division of Publications—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.																																																																																																																																																																																		
<p><i>Salaries, Division of Publications, 1909, \$139,710—Continued.</i></p> <p>The above force performed the following duties—Con.</p> <table><tr><td>18 clerks, at \$720 each</td><td>\$12,960.00</td></tr><tr><td>17 clerks, at \$600 each</td><td>10,200.00</td></tr><tr><td>9 skilled laborers, at \$840 each</td><td>7,560.00</td></tr><tr><td>8 skilled laborers, at \$720 each</td><td>5,760.00</td></tr><tr><td>19 skilled laborers, at \$600 each</td><td>11,400.00</td></tr><tr><td>1 messenger</td><td>840.00</td></tr><tr><td>3 messengers, at \$720 each</td><td>2,160.00</td></tr><tr><td>3 messengers, at \$600 each</td><td>1,800.00</td></tr><tr><td>2 messengers, at \$420 each</td><td>840.00</td></tr><tr><td>1 fireman</td><td>720.00</td></tr><tr><td></td><td><hr/>\$80,680.00</td></tr><tr><td>Total</td><td>139,710.00</td></tr></table> <p><i>Publications, Department of Agriculture, 1909, \$40,000.</i></p> <table><tr><td>Lump fund salaries in Washington</td><td>\$17,543.67</td></tr><tr><td>Stationery</td><td>7,774.07</td></tr><tr><td>Miscellaneous supplies and services, equipment, machinery, etc.</td><td>5,616.52</td></tr><tr><td>Furniture</td><td>785.63</td></tr><tr><td>Freight</td><td>13.51</td></tr><tr><td>Express</td><td>7.70</td></tr><tr><td>Telegraph</td><td>4.33</td></tr><tr><td>Telephone</td><td>78.39</td></tr><tr><td>Rent</td><td>5,000.01</td></tr><tr><td>Gas and electricity</td><td>795.03</td></tr><tr><td>Apparatus, instruments, and laboratory material</td><td>2,293.93</td></tr><tr><td>Total expenditures to August 31, 1909</td><td>39,912.79</td></tr><tr><td>Balance to be turned back in Treasury (estimated)</td><td>87.21</td></tr><tr><td>Total amount of above appropriation</td><td><hr/>40,000.00</td></tr></table> <p>NOTE.—The function of the Division of Publications is to supervise the publication work of the department. This work does not vary in character from year to year, but the amount increases with the growth of the department. Such appropriations as may be necessary should be made for the division in order that it may be equipped to perform promptly and efficiently the duties devolving upon it.</p> <p>The division is charged with the preparation and editing of all manuscripts submitted for publication by the department, including the Yearbook, annual reports, bulletins, etc.; preparation, printing, and distribution of farmers' bulletins; supervision of the printing and binding; preparation of drawings, wood engravings, photographic work of all kinds; necessary indexing; distribution of department publications; and the preparation and distribution of official information and advance notices of publications and features of the work of the department that may be of interest to agricultural writers and papers.</p> <p>The appropriation for the fiscal year 1909 was expended for salaries, rent, necessary furniture, and for supplies in connection with the editorial work, indexing, photographic and drafting work, and the distribution of documents.</p> <p>Total of all appropriations for Division of Publications</p> <hr/> <p>Total expenditures to August 31, 1909</p> <hr/> <p>Balance to be turned back in Treasury (estimated)</p> <hr/> <p>NOTE.—In addition to the above, the Division of Publications has immediate supervision of the fund appropriated in the sundry civil appropriation act for the printing and binding for the department, which for the fiscal year 1909 was \$460,000, so that the total of all funds appropriated for the printing and binding expended under the supervision of the Division of Publications was \$639,710.</p>	18 clerks, at \$720 each	\$12,960.00	17 clerks, at \$600 each	10,200.00	9 skilled laborers, at \$840 each	7,560.00	8 skilled laborers, at \$720 each	5,760.00	19 skilled laborers, at \$600 each	11,400.00	1 messenger	840.00	3 messengers, at \$720 each	2,160.00	3 messengers, at \$600 each	1,800.00	2 messengers, at \$420 each	840.00	1 fireman	720.00		<hr/> \$80,680.00	Total	139,710.00	Lump fund salaries in Washington	\$17,543.67	Stationery	7,774.07	Miscellaneous supplies and services, equipment, machinery, etc.	5,616.52	Furniture	785.63	Freight	13.51	Express	7.70	Telegraph	4.33	Telephone	78.39	Rent	5,000.01	Gas and electricity	795.03	Apparatus, instruments, and laboratory material	2,293.93	Total expenditures to August 31, 1909	39,912.79	Balance to be turned back in Treasury (estimated)	87.21	Total amount of above appropriation	<hr/> 40,000.00	<p><i>Salaries, Division of Publications 1910, \$175,450—Continued.</i></p> <p>The above force is performing the following duties—Continued.</p> <table><tr><td>2 clerks, class one</td><td>\$2,400.00</td></tr><tr><td>5 clerks, at \$1,000 each</td><td>5,000.00</td></tr><tr><td>5 clerks, at \$900 each</td><td>4,500.00</td></tr><tr><td>17 clerks, at \$840 each</td><td>14,280.00</td></tr><tr><td>20 clerks, at \$720 each</td><td>14,400.00</td></tr><tr><td>1 chief folder</td><td>1,000.00</td></tr><tr><td>1 folder</td><td>900.00</td></tr><tr><td>3 folders, at \$840 each</td><td>2,520.00</td></tr><tr><td>2 skilled laborers, at \$900 each</td><td>1,800.00</td></tr><tr><td>15 skilled laborers, at \$840 each</td><td>12,600.00</td></tr><tr><td>14 skilled laborers, at \$780 each</td><td>10,920.00</td></tr><tr><td>18 skilled laborers, at \$720 each</td><td>12,960.00</td></tr><tr><td>2 messengers, at \$840 each</td><td>1,680.00</td></tr><tr><td>3 messengers, at \$720 each</td><td>2,160.00</td></tr><tr><td>2 messengers, at \$420 each</td><td>840.00</td></tr><tr><td>1 messenger</td><td>360.00</td></tr><tr><td>1 fireman</td><td>720.00</td></tr><tr><td>2 laborers, at \$660 each</td><td>1,320.00</td></tr><tr><td>1 laborer</td><td>600.00</td></tr><tr><td>1 charwoman</td><td>480.00</td></tr><tr><td>3 charwomen, at \$240 each</td><td>720.00</td></tr><tr><td></td><td><hr/>\$102,460.00</td></tr><tr><td>Total</td><td>173,450.00</td></tr></table> <p><i>Publications, Department of Agriculture, 1910, \$33,000.</i></p> <table><tr><td>Rent in Washington</td><td>\$5,000.00</td></tr><tr><td>Labor-saving machinery and supplies</td><td>5,000.00</td></tr><tr><td>Envelopes, stationery, and materials</td><td>11,500.00</td></tr><tr><td>Office furniture and fixtures</td><td>1,000.00</td></tr><tr><td>Photographic equipment, photographic materials, artists' tools and supplies</td><td>5,000.00</td></tr><tr><td>Gas, electric current, telephone, freight, express, repairs</td><td>1,500.00</td></tr><tr><td>Wagons, bicycles, horses, harness, and maintenance</td><td>1,000.00</td></tr><tr><td>Purchase of manuscripts, traveling expenses, electrotypes, illustrations, etc.</td><td>3,000.00</td></tr><tr><td>Total amount of above appropriation (a decrease from 1909 of \$7,000)</td><td><hr/>33,000.00</td></tr></table> <p>NOTE.—The appropriation for the current year is being expended for rent, photographic equipment, stationery, machinery to facilitate the distribution of documents, necessary supplies, fixtures, etc. No salaries are being paid from this appropriation.</p> <p>The five photographers provided for have been employed; additional photographic equipment is being installed as rapidly as the appropriation and quarters will permit; and the photographic work required for the illustrations for the publications of the department and for the use of the various bureaus, divisions, and offices is being done satisfactorily and promptly.</p> <p>Only three draftsmen are employed. An additional one is needed to insure the prompt and efficient execution of the work.</p> <p>Total of all appropriations for Division of Publications (an increase over 1909 of \$26,740)</p> <hr/> <p>NOTE.—The above amount is exclusive of \$460,000 appropriated for the printing and binding for the Department of Agriculture, and is being expended under the immediate supervision of the Editor and Chief of the Division of Publications.</p>	2 clerks, class one	\$2,400.00	5 clerks, at \$1,000 each	5,000.00	5 clerks, at \$900 each	4,500.00	17 clerks, at \$840 each	14,280.00	20 clerks, at \$720 each	14,400.00	1 chief folder	1,000.00	1 folder	900.00	3 folders, at \$840 each	2,520.00	2 skilled laborers, at \$900 each	1,800.00	15 skilled laborers, at \$840 each	12,600.00	14 skilled laborers, at \$780 each	10,920.00	18 skilled laborers, at \$720 each	12,960.00	2 messengers, at \$840 each	1,680.00	3 messengers, at \$720 each	2,160.00	2 messengers, at \$420 each	840.00	1 messenger	360.00	1 fireman	720.00	2 laborers, at \$660 each	1,320.00	1 laborer	600.00	1 charwoman	480.00	3 charwomen, at \$240 each	720.00		<hr/> \$102,460.00	Total	173,450.00	Rent in Washington	\$5,000.00	Labor-saving machinery and supplies	5,000.00	Envelopes, stationery, and materials	11,500.00	Office furniture and fixtures	1,000.00	Photographic equipment, photographic materials, artists' tools and supplies	5,000.00	Gas, electric current, telephone, freight, express, repairs	1,500.00	Wagons, bicycles, horses, harness, and maintenance	1,000.00	Purchase of manuscripts, traveling expenses, electrotypes, illustrations, etc.	3,000.00	Total amount of above appropriation (a decrease from 1909 of \$7,000)	<hr/> 33,000.00	<p><i>Salaries, Division of Publications, 1911, \$172,730—Continued.</i></p> <p>The above force will perform the following duties—Continued.</p> <table><tr><td>2 clerks, class one</td><td>\$2,400.00</td></tr><tr><td>4 clerks, at \$1,000 each</td><td>4,000.00</td></tr><tr><td>4 clerks, at \$900 each</td><td>3,600.00</td></tr><tr><td>17 clerks, at \$840 each</td><td>14,280.00</td></tr><tr><td>20 clerks, at \$720 each</td><td>14,400.00</td></tr><tr><td>1 chief folder</td><td>1,000.00</td></tr><tr><td>1 folder</td><td>900.00</td></tr><tr><td>3 folders, at \$840 each</td><td>2,520.00</td></tr><tr><td>2 skilled laborers, at \$900 each</td><td>1,800.00</td></tr><tr><td>15 skilled laborers, at \$840 each</td><td>12,600.00</td></tr><tr><td>14 skilled laborers, at \$780 each</td><td>10,920.00</td></tr><tr><td>18 skilled laborers, at \$720 each</td><td>12,960.00</td></tr><tr><td>2 messengers, at \$840 each</td><td>1,680.00</td></tr><tr><td>3 messengers, at \$720 each</td><td>2,160.00</td></tr><tr><td>2 messengers, at \$420 each</td><td>840.00</td></tr><tr><td>1 messenger</td><td>360.00</td></tr><tr><td>2 laborers, at \$660 each</td><td>1,320.00</td></tr><tr><td>1 laborer</td><td>600.00</td></tr><tr><td>1 charwoman</td><td>480.00</td></tr><tr><td>3 charwomen, at \$240 each</td><td>720.00</td></tr><tr><td></td><td><hr/>\$99,840.00</td></tr><tr><td>Total</td><td>172,730.00</td></tr></table> <p><i>Publications, Department of Agriculture, 1911, \$30,000.</i></p> <table><tr><td>Rent in Washington</td><td>\$5,000.00</td></tr><tr><td>Labor-saving machinery and supplies</td><td>3,000.00</td></tr><tr><td>Envelopes, stationery, and materials</td><td>11,500.00</td></tr><tr><td>Office furniture and fixtures</td><td>1,000.00</td></tr><tr><td>Photographic equipment, photographic materials, artists' tools and supplies</td><td>4,000.00</td></tr><tr><td>Gas, electric current, telephone, freight, express, repairs</td><td>1,500.00</td></tr><tr><td>Wagons, bicycles, horses, harness and maintenance</td><td>1,000.00</td></tr><tr><td>Purchase of manuscripts, traveling expenses, and other expenses not provided for</td><td>3,000.00</td></tr><tr><td>Total amount estimated (a decrease from 1910 of \$3,000)</td><td><hr/>30,000.00</td></tr></table> <p>NOTE.—A decrease of \$3,000 was made possible by the reduction in the amount proposed to expend for labor-saving machinery for addressing and mailing documents, of which amount \$600 is to be transferred to the contingent fund for mechanical shop work.</p> <p>Total amount estimated for the Division of Publications (a decrease from 1910 of \$3,720)</p> <hr/> <p>NOTE.—Exclusive of \$460,000 estimated for printing and binding for the department, to be included in the sundry civil appropriation act, expended under the immediate supervision of the Editor and Chief of the Division of Publications.</p>	2 clerks, class one	\$2,400.00	4 clerks, at \$1,000 each	4,000.00	4 clerks, at \$900 each	3,600.00	17 clerks, at \$840 each	14,280.00	20 clerks, at \$720 each	14,400.00	1 chief folder	1,000.00	1 folder	900.00	3 folders, at \$840 each	2,520.00	2 skilled laborers, at \$900 each	1,800.00	15 skilled laborers, at \$840 each	12,600.00	14 skilled laborers, at \$780 each	10,920.00	18 skilled laborers, at \$720 each	12,960.00	2 messengers, at \$840 each	1,680.00	3 messengers, at \$720 each	2,160.00	2 messengers, at \$420 each	840.00	1 messenger	360.00	2 laborers, at \$660 each	1,320.00	1 laborer	600.00	1 charwoman	480.00	3 charwomen, at \$240 each	720.00		<hr/> \$99,840.00	Total	172,730.00	Rent in Washington	\$5,000.00	Labor-saving machinery and supplies	3,000.00	Envelopes, stationery, and materials	11,500.00	Office furniture and fixtures	1,000.00	Photographic equipment, photographic materials, artists' tools and supplies	4,000.00	Gas, electric current, telephone, freight, express, repairs	1,500.00	Wagons, bicycles, horses, harness and maintenance	1,000.00	Purchase of manuscripts, traveling expenses, and other expenses not provided for	3,000.00	Total amount estimated (a decrease from 1910 of \$3,000)	<hr/> 30,000.00
18 clerks, at \$720 each	\$12,960.00																																																																																																																																																																																			
17 clerks, at \$600 each	10,200.00																																																																																																																																																																																			
9 skilled laborers, at \$840 each	7,560.00																																																																																																																																																																																			
8 skilled laborers, at \$720 each	5,760.00																																																																																																																																																																																			
19 skilled laborers, at \$600 each	11,400.00																																																																																																																																																																																			
1 messenger	840.00																																																																																																																																																																																			
3 messengers, at \$720 each	2,160.00																																																																																																																																																																																			
3 messengers, at \$600 each	1,800.00																																																																																																																																																																																			
2 messengers, at \$420 each	840.00																																																																																																																																																																																			
1 fireman	720.00																																																																																																																																																																																			
	<hr/> \$80,680.00																																																																																																																																																																																			
Total	139,710.00																																																																																																																																																																																			
Lump fund salaries in Washington	\$17,543.67																																																																																																																																																																																			
Stationery	7,774.07																																																																																																																																																																																			
Miscellaneous supplies and services, equipment, machinery, etc.	5,616.52																																																																																																																																																																																			
Furniture	785.63																																																																																																																																																																																			
Freight	13.51																																																																																																																																																																																			
Express	7.70																																																																																																																																																																																			
Telegraph	4.33																																																																																																																																																																																			
Telephone	78.39																																																																																																																																																																																			
Rent	5,000.01																																																																																																																																																																																			
Gas and electricity	795.03																																																																																																																																																																																			
Apparatus, instruments, and laboratory material	2,293.93																																																																																																																																																																																			
Total expenditures to August 31, 1909	39,912.79																																																																																																																																																																																			
Balance to be turned back in Treasury (estimated)	87.21																																																																																																																																																																																			
Total amount of above appropriation	<hr/> 40,000.00																																																																																																																																																																																			
2 clerks, class one	\$2,400.00																																																																																																																																																																																			
5 clerks, at \$1,000 each	5,000.00																																																																																																																																																																																			
5 clerks, at \$900 each	4,500.00																																																																																																																																																																																			
17 clerks, at \$840 each	14,280.00																																																																																																																																																																																			
20 clerks, at \$720 each	14,400.00																																																																																																																																																																																			
1 chief folder	1,000.00																																																																																																																																																																																			
1 folder	900.00																																																																																																																																																																																			
3 folders, at \$840 each	2,520.00																																																																																																																																																																																			
2 skilled laborers, at \$900 each	1,800.00																																																																																																																																																																																			
15 skilled laborers, at \$840 each	12,600.00																																																																																																																																																																																			
14 skilled laborers, at \$780 each	10,920.00																																																																																																																																																																																			
18 skilled laborers, at \$720 each	12,960.00																																																																																																																																																																																			
2 messengers, at \$840 each	1,680.00																																																																																																																																																																																			
3 messengers, at \$720 each	2,160.00																																																																																																																																																																																			
2 messengers, at \$420 each	840.00																																																																																																																																																																																			
1 messenger	360.00																																																																																																																																																																																			
1 fireman	720.00																																																																																																																																																																																			
2 laborers, at \$660 each	1,320.00																																																																																																																																																																																			
1 laborer	600.00																																																																																																																																																																																			
1 charwoman	480.00																																																																																																																																																																																			
3 charwomen, at \$240 each	720.00																																																																																																																																																																																			
	<hr/> \$102,460.00																																																																																																																																																																																			
Total	173,450.00																																																																																																																																																																																			
Rent in Washington	\$5,000.00																																																																																																																																																																																			
Labor-saving machinery and supplies	5,000.00																																																																																																																																																																																			
Envelopes, stationery, and materials	11,500.00																																																																																																																																																																																			
Office furniture and fixtures	1,000.00																																																																																																																																																																																			
Photographic equipment, photographic materials, artists' tools and supplies	5,000.00																																																																																																																																																																																			
Gas, electric current, telephone, freight, express, repairs	1,500.00																																																																																																																																																																																			
Wagons, bicycles, horses, harness, and maintenance	1,000.00																																																																																																																																																																																			
Purchase of manuscripts, traveling expenses, electrotypes, illustrations, etc.	3,000.00																																																																																																																																																																																			
Total amount of above appropriation (a decrease from 1909 of \$7,000)	<hr/> 33,000.00																																																																																																																																																																																			
2 clerks, class one	\$2,400.00																																																																																																																																																																																			
4 clerks, at \$1,000 each	4,000.00																																																																																																																																																																																			
4 clerks, at \$900 each	3,600.00																																																																																																																																																																																			
17 clerks, at \$840 each	14,280.00																																																																																																																																																																																			
20 clerks, at \$720 each	14,400.00																																																																																																																																																																																			
1 chief folder	1,000.00																																																																																																																																																																																			
1 folder	900.00																																																																																																																																																																																			
3 folders, at \$840 each	2,520.00																																																																																																																																																																																			
2 skilled laborers, at \$900 each	1,800.00																																																																																																																																																																																			
15 skilled laborers, at \$840 each	12,600.00																																																																																																																																																																																			
14 skilled laborers, at \$780 each	10,920.00																																																																																																																																																																																			
18 skilled laborers, at \$720 each	12,960.00																																																																																																																																																																																			
2 messengers, at \$840 each	1,680.00																																																																																																																																																																																			
3 messengers, at \$720 each	2,160.00																																																																																																																																																																																			
2 messengers, at \$420 each	840.00																																																																																																																																																																																			
1 messenger	360.00																																																																																																																																																																																			
2 laborers, at \$660 each	1,320.00																																																																																																																																																																																			
1 laborer	600.00																																																																																																																																																																																			
1 charwoman	480.00																																																																																																																																																																																			
3 charwomen, at \$240 each	720.00																																																																																																																																																																																			
	<hr/> \$99,840.00																																																																																																																																																																																			
Total	172,730.00																																																																																																																																																																																			
Rent in Washington	\$5,000.00																																																																																																																																																																																			
Labor-saving machinery and supplies	3,000.00																																																																																																																																																																																			
Envelopes, stationery, and materials	11,500.00																																																																																																																																																																																			
Office furniture and fixtures	1,000.00																																																																																																																																																																																			
Photographic equipment, photographic materials, artists' tools and supplies	4,000.00																																																																																																																																																																																			
Gas, electric current, telephone, freight, express, repairs	1,500.00																																																																																																																																																																																			
Wagons, bicycles, horses, harness and maintenance	1,000.00																																																																																																																																																																																			
Purchase of manuscripts, traveling expenses, and other expenses not provided for	3,000.00																																																																																																																																																																																			
Total amount estimated (a decrease from 1910 of \$3,000)	<hr/> 30,000.00																																																																																																																																																																																			

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

BUREAU OF STATISTICS.

Detailed expenditures for the fiscal year ended June 30, 1909.		Appropriations for the current fiscal year ending June 30, 1910.		Estimated expenditures for the fiscal year ending June 30, 1911.	
<i>Salaries, Bureau of Statistics, 1909, \$96,640.</i>		<i>Salaries, Bureau of Statistics, 1910, \$103,860.</i>		<i>Salaries, Bureau of Statistics, 1911, \$104,700.</i>	
Olmsted, Victor H.....	Statistician and chief of bureau at \$3,500.....	\$2,479.17	1 statistician, who shall be chief of bureau.....	\$3,500.00	1 statistician, who shall be chief of bureau.....
Murray, Nat C.....	Assistant statistician and assistant chief of bureau at \$2,500.....	2,500.00	1 assistant statistician, who shall be assistant chief of bureau.....	2,500.00	1 assistant statistician, who shall be assistant chief of bureau.....
Jones, S. A.....	Chief clerk, at \$1,800.....	1,800.00	1 chief clerk.....	1,800.00	1 chief clerk.....
Andrews, Frank.....	Clerk, class four.....	1,800.00	6 clerks, class four.....	10,800.00	6 clerks, class four.....
Covert, J. R.....	Clerk, class four.....	1,800.00	9 clerks, class three.....	14,400.00	9 clerks, class three.....
Ferguson, G. R.....	Clerk, class four.....	1,800.00	12 clerks, class two.....	16,800.00	12 clerks, class two.....
Graham, H. C.....	Clerk, class four.....	1,800.00	2 clerks, at \$1,300 each.....	2,600.00	2 clerks, at \$1,300 each.....
Smith, R. E.....	Clerk, class four.....	1,800.00	16 clerks, class one.....	19,200.00	16 clerks, class one.....
Thompson, E. S.....	Clerk, class four.....	1,800.00	10 clerks, at \$1,000 each.....	10,000.00	10 clerks, at \$1,000 each.....
Blodgett, James H.....	Clerk, class three.....	1,600.00	6 clerks, at \$900 each.....	5,400.00	6 clerks, at \$900 each.....
Hammargren, E. L.....	Clerk, class three.....	1,600.00	5 clerks, at \$840 each.....	4,200.00	6 clerks, at \$840 each (increase of one by transfer from lump fund).....
Houser, A. M.....	Clerk, class three.....	1,595.56	10 clerks, at \$720 each.....	7,200.00	10 clerks, at \$720 each.....
Leith, C. A.....	Clerk, class three.....	1,600.00	2 messengers, at \$840 each.....	1,680.00	2 messengers, at \$840 each.....
McKenna, R. T.....	Clerk, class three.....	1,600.00	1 messenger.....	660.00	1 messenger.....
Smedes, H. R.....	Clerk, class three.....	1,600.00	1 messenger.....	480.00	1 messenger.....
Smith, Middleton.....	Clerk, class three.....	1,600.00	1 laborer.....	720.00	1 laborer.....
Stier, D. W.....	Clerk, class three.....	1,600.00	1 laborer.....	660.00	1 laborer.....
Stone, Israel W.....	Clerk, class three.....	1,600.00	1 charwoman.....	540.00	1 charwoman.....
Burch, Lillian.....	Clerk, class two.....	1,400.00	2 charwomen, at \$360 each.....	720.00	2 charwomen, at \$360 each.....
Cooney, F. C.....	Clerk, class two.....	1,400.00			
Fletcher, C. P.....	Clerk, class two.....	1,400.00			
Latham, E. G.....	Clerk, class two.....	1,400.00			
O'Donoghue, C.....	Clerk, class two.....	1,376.67			
Painter, J. L.....	Clerk, class two.....	910.00			
Rothrock, Lenlah.....	Clerk, class two.....	466.66			
Pepper, J. G.....	Clerk, class two.....	1,376.67			
Quinn, E. H.....	Clerk, class two.....	1,400.00			
Safford, M. F.....	Clerk, class two.....	1,400.00			
Schaake, J. J.....	Clerk, class two.....	1,400.00			
Schmidt, Flora.....	Clerk, class two.....	1,400.00			
Shanahan, M. E.....	Clerk, class two.....	1,400.00			
Jones, L. M.....	Clerk, at \$1,300.....	400.83			
Wright, A. M.....	Clerk, at \$1,300.....	866.67			
Lee, W. D.....	Clerk, at \$1,300.....	1,274.73			
Adams, S. G.....	Clerk, class one.....	1,200.00			
Bowie, M. S.....	Clerk, class one.....	1,200.00			
Clark, E. L.....	Clerk, class one.....	1,200.00			
Elliott, Perry.....	Clerk, class one.....	800.00			
Wright, A. M.....	Clerk, class one.....	400.00			
Fansler, O. N.....	Clerk, class one.....	1,200.00			
Finckel, C. B.....	Clerk, class one.....	1,200.00			
Lancaster, C. M.....	Clerk, class one.....	1,116.67			
Love, A. H.....	Clerk, class one.....	1,176.67			
Peabody, John.....	Clerk, class one.....	460.00			
Yonce, S. H.....	Clerk, class one.....	460.00			
Peirce, M. R.....	Clerk, class one.....	1,200.00			
Phillips, Nettie.....	Clerk, class one.....	1,196.67			
Skinner, Sara.....	Clerk, class one.....	1,200.00			
Walden, Celena.....	Clerk, class one.....	1,200.00			
Woodward, E. G.....	Clerk, class one.....	1,200.00			
Blanford, E. M.....	Clerk, at \$1,000.....	383.34			
Peabody, John.....	Clerk, at \$1,000.....	616.66			
Bostwick, H. M.....	Clerk, at \$1,000.....	1,000.00			
Connor, R. L.....	Clerk, at \$1,000.....	1,000.00			
Elliott, Perry.....	Clerk, at \$1,000.....	333.33			
Fisher, Gertrude.....	Clerk, at \$1,000.....	666.67			
Ingram, M. M.....	Clerk, at \$1,000.....	811.12			
King, W. M.....	Clerk, at \$1,000.....	1,000.00			
Michaels, M. M.....	Clerk, at \$1,000.....	1,000.00			
Wharton, V. K.....	Clerk, at \$1,000.....	1,000.00			
Ballard, N. P.....	Clerk, at \$900.....	782.50			
Cavanagh, J. L.....	Clerk, at \$900.....	900.00			
Fisher, Gertrude.....	Clerk, at \$900.....	300.00			
Sartor, L. E.....	Clerk, at \$900.....	600.00			
Wood, M. L.....	Clerk, at \$900.....	900.00			
Bell, Florence.....	Clerk, at \$840.....	798.00			
Blanford, E. M.....	Clerk, at \$840.....	518.00			
Collins, F. P.....	Clerk, at \$840.....	322.00			
Lederer, B. B.....	Clerk, at \$840.....	837.67			
Noah, Esther.....	Clerk, at \$840.....	837.67			
Alexander, S. C.....	Clerk, at \$720.....	720.00			
Andersen, Charles.....	Clerk, at \$720.....	540.00			
Babbitt, G. H.....	Clerk, at \$720.....	120.00			
Cannon, S. P.....	Clerk, at \$720.....	720.00			
Claycomb, C. C.....	Clerk, at \$720.....	720.00			
Collins, F. P.....	Clerk, at \$720.....	442.00			
Greene, Fred B.....	Clerk, at \$720.....	276.00			
Eaton, C. E.....	Clerk, at \$720.....	720.00			
Foster, M. A.....	Clerk, at \$720.....	153.33			
Murdock, W. B.....	Clerk, at \$720.....	270.00			
Potter, Burton M.....	Clerk, at \$720.....	274.00			
Phillips, Emma B.....	Clerk, at \$720.....	450.00			
Pray, Lloyd G.....	Clerk, at \$720.....	690.00			
Raymond, M. J.....	Clerk, at \$720.....	720.00			
Burner, Violet E.....	Clerk, at \$600.....	346.66			
Foster, M. A.....	Clerk, at \$600.....	278.33			
Gallenne, Isabelle J.....	Clerk, at \$600.....	350.00			
Greene, Fred B.....	Clerk, at \$600.....	205.00			
Pray, Lloyd G.....	Clerk, at \$600.....	25.00			
Miner, C. C.....	Clerk, at \$600.....	75.00			
Mullican, Eugenia.....	Clerk, at \$600.....	135.00			
			Total amount of above appropriation (an increase over 1909 of \$7,220).....	103,860.00	
					Total amount estimated (an apparent increase over 1910 of \$840)..... 104,700.00
					NOTE.—One clerk at \$840 has been added by transfer from lump fund, and that fund reduced accordingly.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 19 0.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Bureau of Statistics, 1909, \$96,640—Continued.</i>	<i>Salaries, Bureau of Statistics, 1910, \$103,860—Con.</i>	<i>Salaries, Bureau of Statistics, 1911, \$104,700—Con.</i>
Woolf, W. H., Jr. Clerk, at \$600..... \$170. 00 Brent, N. W. Messenger, at \$840..... 816. 67 Wharton, J. J. Messenger, at \$840..... 840. 00 Total..... 92,320. 91 Unexpended balance..... 4,319. 09 Total amount of above appropriation..... 96,640.00	The above force are performing the following duties: Administrative and executive: Office of the statistician— 1 statistician..... \$3,500 1 assistant statistician..... 2,500 1 clerk, class four..... 1,800 3 clerks, class three..... 4,800 \$12,600 Office of the chief clerk— 1 chief clerk..... \$1,800 1 clerk, at \$1,300..... 1,300 2 clerks, class one..... 2,400 1 clerk, at \$1,000..... 1,000 3 clerks, at \$720..... 2,160 1 messenger, at \$840..... 840 1 messenger, at \$660..... 660 1 messenger, at \$480..... 480 1 laborer, at \$720..... 720 1 laborer, at \$660..... 660 1 charwoman, at \$540..... 540 2 charwomen, at \$360..... 720 13,280 \$25,880.00 Division of domestic crop reports: 1 clerk, class three..... \$1,600 1 clerk, class two..... 1,400 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 5,200 Section of township reports— 1 clerk, class three..... \$1,600 3 clerks, class two..... 4,200 1 clerk, at \$1,300..... 1,300 5 clerks, class one..... 6,000 1 clerk, at \$1,000..... 1,000 1 clerk, at \$840..... 840 3 clerks, at \$720..... 2,160 17,100 Section of county reports— 2 clerks, class four..... \$3,600 1 clerk, class three..... 1,600 3 clerks, class two..... 4,200 9,400 Computing section— 2 clerks, class two..... \$2,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 1 clerk, at \$720..... 720 5,720	The above force will perform the following duties: Administrative and executive: Office of the statistician— 1 statistician..... \$3,500 1 assistant statistician..... 2,500 1 clerk, class four..... 1,800 3 clerks, class three..... 4,800 \$12,600 Office of the chief clerk— 1 chief clerk..... \$1,800 1 clerk, at \$1,300..... 1,300 2 clerks, class one..... 2,400 1 clerk, at \$1,000..... 1,000 3 clerks, at \$720..... 2,160 1 messenger, at \$840..... 840 1 messenger, at \$660..... 660 1 messenger, at \$480..... 480 1 laborer, at \$720..... 720 1 laborer, at \$660..... 660 1 charwoman, at \$540..... 540 2 charwomen, at \$360..... 720 13,280 \$25,880.00 Division of domestic crop reports: 1 clerk, class three..... \$1,600 1 clerk, class two..... 1,400 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 5,200 Section of township reports— 1 clerk, class three..... \$1,600 3 clerks, class two..... 4,200 1 clerk, at \$1,300..... 1,300 5 clerks, class one..... 6,000 1 clerk, at \$1,000..... 1,000 1 clerk, at \$840..... 840 3 clerks, at \$720..... 2,160 17,100 Section of county reports— 2 clerks, class four..... \$3,600 1 clerk, class three..... 1,600 3 clerks, class two..... 4,200 9,400 Computing section— 2 clerks, class two..... \$2,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 1 clerk, at \$720..... 720 5,720

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<p><i>Salaries, Bureau of Statistics, 1909, \$96,640—Continued.</i></p> <p>The above force performed the following duties—Continued.</p> <p>Miscellaneous section— Duties: Typewriting and general clerical work.</p> <p>Mailing section— 2 clerks, class one..... \$2,400 1 clerk, at \$840..... 840 2 clerks, at \$720..... 1,440 \$4,680</p> <p>Duties: Mailing, receiving and distributing statistical inquiries and reports, including township, county, and special returns.</p> <p>Editorial division and library: Editorial section— 1 clerk, class four..... \$1,800 2 clerks, class three..... 3,200 1 clerk, at \$720..... 720 1 messenger, at \$840..... 840 6,560</p> <p>Duties: Editing bulletins and other publications of the bureau; special correspondence relative to statistical and economic subjects; preparing statistical reports and bulletins on matters relating to agriculture; translating letters, papers, and miscellaneous publications from foreign languages, and preparing miscellaneous data for the Crop Reporter.</p> <p>Library section— 1 clerk, class two..... \$1,400 1 clerk, at \$1,000..... 1,000 2,400</p> <p>Duties: Examining and indexing for the bureau library domestic and foreign government reports, statements of commercial and agricultural associations, trade publications, and newspapers.</p> <p>Typewriting section— 1 clerk, at \$1,000..... \$1,000 1 clerk, at \$900..... 900 1 clerk, at \$840..... 840 1 clerk, at \$720..... 720 3,460</p> <p>Division of production and distribution: 2 clerks, class four..... 3,600 1 clerk, class three..... 1,600 2 clerks, class two..... 2,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 2 clerks, at \$900..... 1,800 1 clerk, at \$840..... 840 3 clerks, at \$720..... 2,160 1 clerk, at \$600..... 600 15,000.00</p> <p>Duties: Concerned with the production of wealth on farms, with the distribution of farm products at home and abroad and with the economic conditions pertaining to the agricultural element of the population. This work includes the preparation and publication of bulletins and tables concerning the exports and imports of all countries publishing this information; the cost of transportation from farms to local markets, as well as to central markets, seaports, and foreign markets; freight rates on agricultural products by rail and water within the United States; economic and cooperative movements among agriculturists. Including the questions of agricultural capital and labor; the preparation of those parts of the Yearbook Appendix referring to production, exports, and imports. In this division is handled special correspondence concerning economics, education, and cooperation in their relation to the agricultural interests of the United States.</p> <p><i>Collecting agricultural statistics, 1909, \$125,000.</i></p> <p>Items of expenditure: Salaries— In Washington..... \$21,603.68 Outside Washington..... 61,982.87 Traveling expenses..... 25,594.41 Stationery..... 6,548.04 Miscellaneous supplies and services, equipment, books, machinery, etc..... 2,237.72 Furniture..... 345.18 Freight..... 78.43 Express..... 19.27</p>	<p><i>Salaries, Bureau of Statistics, 1910, \$103,860—Con.</i></p> <p>The above force are performing the following duties—Con.</p> <p>Miscellaneous section— 2 clerks, class one.. \$2,400 2 clerks, at \$1,000.. 2,000 \$4,400</p> <p>Mailing section— 3 clerks, class one.. 3,600 1 clerk, at \$900.... 900 1 clerk, at \$840.... 840 2 clerks, at \$720.... 1,440 6,780</p> <p>Editorial division and library: Editorial section— 1 clerk, class four.. \$1,800 2 clerks, class three 3,200 1 clerk, class one.. 1,200 1 clerk, at \$1,000.. 1,000 1 messenger, at \$840 840 8,040</p> <p>Library section— 1 clerk, class two... 1,400 1 clerk, at \$1,000... 1,000 2,400</p> <p>Typewriting section— 1 clerk, at \$1,000... 1,000 1 clerk, at \$900.... 900 2 clerks, at \$840.... 1,680 3,580</p> <p>Division of production and distribution: 2 clerks, class four..... 3,600 1 clerk, class three..... 1,600 2 clerks, class two..... 2,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 4 clerks, at \$900..... 3,600 1 clerk, at \$840..... 840 1 clerk, at \$720..... 720 15,360.00</p> <p>General expenses, Bureau of Statistics, 1910, \$117,060.</p> <p>Items of expenditure: Salaries— In Washington..... \$14,800.00 Outside Washington..... 59,350.00 Traveling expenses..... 31,850.00 Stationery..... 5,000.00 Miscellaneous supplies and services, equipment, books, machinery, etc..... 3,500.00 Furniture..... 1,500.00 Freight..... 150.00</p>	<p><i>Salaries, Bureau of Statistics, 1911, \$104,700—Con.</i></p> <p>The above force will perform the following duties—Con.</p> <p>Miscellaneous section— 2 clerks, class one.. \$2,400 2 clerks, at \$1,000.. 2,000 \$4,400</p> <p>Mailing section— 3 clerks, class one.. 3,600 1 clerk, at \$900.... 900 2 clerks, at \$840.... 1,680 2 clerks, at \$720.... 1,440 7,620</p> <p>Editorial division and library: Editorial section— 1 clerk, class four.. \$1,800 2 clerks, class three 3,200 1 clerk, class one.. 1,200 1 clerk, at \$1,000.. 1,000 1 messenger, at \$840 840 8,040</p> <p>Library section— 1 clerk, class two... 1,400 1 clerk, at \$1,000... 1,000 2,400</p> <p>Typewriting section— 1 clerk, at \$1,000... 1,000 1 clerk, at \$900.... 900 2 clerks, at \$840.... 1,680 3,580</p> <p>Division of production and distribution: 2 clerks, class four..... 3,600 1 clerk, class three..... 1,600 2 clerks, class two..... 2,800 1 clerk, class one..... 1,200 1 clerk, at \$1,000..... 1,000 4 clerks, at \$900..... 3,600 1 clerk, at \$840..... 840 1 clerk, at \$720..... 720 15,360.00</p> <p>General expenses, Bureau of Statistics, 1911, \$115,620.</p> <p>Items of expenditure: Salaries— In Washington..... \$14,020.00 Outside Washington..... 59,350.00 Traveling expenses..... 31,350.00 Stationery..... 5,500.00 Miscellaneous supplies and services, equipment, books, machinery, etc..... 2,900.00 Furniture..... 1,500.00 Freight..... 150.00</p>
96,640.00	103,860.00	104,700.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>General expenses, Bureau of Statistics, 1910, \$117,030—Continued.</i>	<i>General expenses, Bureau of Statistics, 1911, \$115,620—Continued.</i>
Items of expenditure—Continued.	Items of expenditure—Continued.	Items of expenditure—Continued.
Telegraph..... \$461.39	Express..... \$100.00	Express..... \$100.00
Telephone..... 37.94	Telegraph..... 650.00	Telegraph..... 650.00
	Telephone..... 100.00	Telephone..... 100.00
Total expenditures to August 31, 1909..... 118,908.93		
Outstanding liabilities on August 31, 1909 (estimated)..... 3,612.58	Total amount of above appropriation (an apparent decrease from 1909 of \$7,940)..... 117,060.00	Total amount estimated (an apparent decrease from 1910 of \$1,440)..... 115,620.00
Balance to be turned back into Treasury (estimated)..... 2,478.49		
Total amount of above appropriation..... 125,000.00		
	NOTE.—While the apparent decrease from the appropriation for 1909 is \$7,940, there is an actual increase of \$860 due to the transfer of places to the statutory roll, amounting to \$8 800.	NOTE.—The apparent decrease from the 1910 appropriation is \$1,440, but as \$840 of this represents a transfer to the statutory roll, the actual decrease is only \$600.
The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were for the following objects:	The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are for the following objects:	The above estimates of expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are submitted for the following objects:
Objects of expenditure:	Objects of expenditure:	Objects of expenditure:
Crop report..... \$93,147.16	Crop report..... \$99,860.00	Crop report..... \$99,020.00
Administrative and executive..... 11,569.59	Administrative and executive..... 6,200.00	Administrative and executive..... 5,600.00
Bulletins, special investigations, etc..... 9,658.91	Bulletins, special investigations, etc..... 7,500	Bulletins, special investigations, etc..... 7,500.00
Cooperative work with Minnesota Experiment Station..... 2,359.99	Cooperative work with Minnesota Experiment Station..... 2,500.00	Cooperative work with Minnesota Experiment Station..... 2,500.00
Work for other bureaus..... 2,173.28	Work for other bureaus..... 1,000.00	Work for other bureaus..... 1,000.00
Total..... 118,908.93	Total..... 117,060.00	Total..... 115,620.00
Items of expenditure, subdivided by objects:	Items of expenditure, subdivided by objects:	Items of expenditure, subdivided by objects:
Salaries in Washington—	Salaries in Washington—	Salaries in Washington—
Crop report..... 3,303.35	Crop report..... \$6,360	Crop report..... \$5,520
Administrative and executive..... 9,548.11	Administrative and executive..... 3,000	Administrative and executive..... 3,000
Bulletins, special investigations, etc..... 6,578.94	Bulletins, special investigations, etc..... 4,500	Bulletins, special investigations, etc..... 4,500
Work for other bureaus..... 2,173.28	Work for other bureaus..... 1,000	Work for other bureaus..... 1,000
	14,860	14,020
Salaries outside Washington—	Salaries outside Washington—	Salaries outside Washington—
Crop report..... 58,922.88	Crop report..... \$56,850	Crop report..... \$56,850
Cooperative work with Minnesota Experiment Station..... 2,359.99	Cooperative work with Minnesota Experiment Station..... 2,500	Cooperative work with Minnesota Experiment Station..... 2,500
Bulletins, special investigations, etc..... 700.00		
	59,350	59,350
Traveling expenses—	Traveling expenses—	Traveling expenses—
Crop report..... 24,317.69	Crop report..... 29,350	Crop report..... 29,350
Administrative and executive..... 416.34	Administrative and executive..... 1,000	Administrative and executive..... 1,000
Bulletins, special investigations, etc..... 860.38	Bulletins, special investigations, etc..... 1,500	Bulletins, special investigations, etc..... 1,000
	31,850	31,350
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc.—
Crop report..... 6,063.42	Crop report..... \$6,500	Crop report..... \$6,500
Administrative and executive..... 1,547.93	Administrative and executive..... 2,000	Administrative and executive..... 1,400
Bulletins, special investigations, etc..... 1,519.59	Bulletins, special investigations, etc..... 1,500	Bulletins, special investigations, etc..... 2,000
	10,000	9,900
Freight, express, telegraph, and telephone—	Freight, express, telegraph, and telephone—	Freight, express, telegraph, and telephone—
Crop report..... 539.82	Crop report..... \$800	Crop report..... \$800
Administrative and executive..... 57.21	Administrative and executive..... 200	Administrative and executive..... 200
	1,000	1,000
Total..... 118,908.93	Total..... 117,060	Total..... 115,620
Objects of expense, subdivided by items:	Objects of expense, subdivided by items:	Objects of expense, subdivided by items:
Crop report—	Crop report—	Crop report—
Salaries—	Salaries—	Salaries—
In Washington..... 3,303.35	In Washington..... \$6,360	In Washington..... \$5,520
Outside Washington..... 58,922.88	Outside Washington..... 56,850	Outside Washington..... 56,850
Travel..... 24,317.69	Travel..... 29,350	Travel..... 29,350
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 6,063.42	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 6,500	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 6,500
Freight, express, telegraph, and telephone..... 539.82	Freight, express, telegraph and telephone..... 800	Freight, express, telegraph and telephone..... 800
	99,860	99,020

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>General expenses, Bureau of Statistics, 1910, \$117,950—Continued.</i>	<i>General expenses, Bureau of Statistics, 1911, \$115,620—Continued.</i>
Administrative and executive—	Administrative and executive—	Administrative and executive—
Salaries in Washington..... \$9,548.11	Salaries in Washington..... \$3,000	Salaries in Washington..... \$3,000
Travel..... 416.34	Travel..... 1,000	Travel..... 1,000
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 1,547.93	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 2,000	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 1,400
Freight, express, telegraph, and telephone.. 57.21	Freight, express, telegraph and telephone.. 200	Freight, express, telegraph and telephone.. 200
	\$6,200	\$5,600
Bulletins, special investigations, etc.—	Bulletins, special investigations, etc.—	Bulletins, special investigations, etc.—
Salaries—	Salaries in Washington..... \$4,500	Salaries in Washington..... \$4,500
In Washington..... 6,578.94	Travel..... 1,500	Travel..... 1,000
Outside Washington..... 700.00	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 1,500	Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 2,000
Travel..... 860.38		
Stationery, furniture, miscellaneous supplies and services, equipment, books, machinery, etc..... 1,519.59		
	7,500	7,500
Cooperative work with Minnesota Experiment Station—	Cooperative work with Minnesota Experiment Station—	Cooperative work with Minnesota Experiment Station—
Salaries outside Washington..... 2,359.99	Salaries outside Washington... 2,500	Salaries outside Washington... 2,500
Work for other bureaus—	Work for other bureaus—	Work for other bureaus—
Salaries in Washington..... 2,173.28	Salaries in Washington..... 1,000	Salaries in Washington..... 1,000
Total..... 118,908.93	Total..... 117,060	Total..... 115,620
Total of appropriations for the Bureau of Statistics, 1909..... 221,640.00	Total of appropriations for the Bureau of Statistics, 1910..... 220,920.00	Total estimates for appropriations for the Bureau of Statistics, 1911..... 220,320.00
Unexpended balance to be turned back into the Treasury (estimated)..... 6,757.58		
Total amount expended..... 214,882.42		
The total expenditures of the bureau, as above set forth, were applied to the objects stated in detail below:	The appropriations for the Bureau of Statistics are being applied to the objects stated in detail below:	The estimates for the Bureau of Statistics are submitted for appropriation for the objects stated in detail below:
PROJECTS.	PROJECTS.	PROJECTS.
Bulletins:	Bulletins:	Bulletins:
Publications of more or less magnitude, containing comprehensive information concerning special agricultural products or economic subjects pertaining to agriculture, such as the production and value of important crops through a long period of years, production and consumption, cost of production, expenses and methods of marketing, imports and exports, foreign production, etc. The range of subjects is as broad as the fundamental occupation to which they all relate.	Unpublished bulletins, being prepared in 1909, are being carried forward toward completion, and new ones have been started under the following titles:	
The bulletins upon which work was performed, and the amount expended for each, are as follows:	State regulations for produce exchanges in the principal countries.	
(38 a) Crop export movement and port facilities on the Atlantic and Gulf coasts..... \$1,017.76	Cost of producing farm products in the United States.	
(40 a) Meat animals and packing-house products imported into 11 principal countries, 1895-1904..... 827.08	Wages of farm labor in the United States, 1866-1909.	
(50 a) Hops in principal countries; their supply, foreign trade, and consumption, with statistics of beer brewing..... 68.21	Crop-reporting systems of various countries.	
(51) Foreign trade of the United States in forest products, 1851-1908 (in press)..... 496.66		
(54 a) Trade with noncontiguous possessions in farm and forest products, 1904-1906..... 3.98		
(55 a) Meat supply and surplus, with consideration of consumption and exports..... 168.44		
(56 to 63) Corn, wheat, oat, barley, rye, buckwheat, potato, and hay crops of the United States, 1866-1906, revised (unpublished)..... 332.39		
(64) Number and farm value of farm animals in the United States, 1867-1907, revised (unpublished)..... 177.59		
(68 a) Cereal production of Europe..... 22.08		
(69 a) European grain trade..... 19.57		
(70) Imports of farm and forest products, 1905-1907, by countries from which consigned..... 390.68		
(71) Exports of farm and forest products, 1905-1907, by countries to which consigned..... 390.68		
(72) Agricultural imports of the Netherlands..... 316.56		
(73) Cost of producing Minnesota farm products, 1902-1907..... 682.37		
(74) Imports of farm products into the United States, 1851-1908 (in press)..... 3,970.20		
(75) Exports of farm products from the United States, 1851-1908 (in press)..... 1,531.82		
(76) Imports of farm and forest products, 1906-1908, by countries from which consigned (in press)..... 442.77		

^a Compilation of data for period subsequent to publication of bulletin.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>General expenses, Bureau of Statistics, 1910, \$117,060—Continued.</i>	<i>General expenses, Bureau of Statistics, 1911, \$115,620—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(77) Exports of farm and forest products, 1906-1908, by countries to which consigned (in press)..... \$440.35		
Balkan agriculture (unpublished)..... 493.20		
Chronology of United States agriculture (unpublished)..... 752.28		
Consolidated rural schools in the United States (statistical inquiry) (unpublished)..... 1,422.05		
Cost and methods of marketing farm products in the region of the Great Lakes (unpublished)..... 378.69		
Crop movement and transportation facilities of the Pacific coast (unpublished)..... 846.11		
Dates of planting and maturity of crops in the United States and foreign countries (unpublished)..... 417.06		
Fire, live stock, and crop insurance (unpublished).... 167.08		
World's production and trade in cocoanuts (unpublished)..... 53.72		
World's production, trade, and consumption of coffee (unpublished)..... 873.38		
World's production and trade in wheat (unpublished). 2,207.85		
Total..... 18,912.61	Total..... \$20,000.00	Total..... \$20,000.00
Crop report:	Crop report:	Crop report:
Object: To collect information showing acreage, condition during the growing season, and final yield, value, etc., of important farm products; and, annually, the number, value, and status of farm animals; to compile and tabulate such data, and to make public estimates based thereon.		
Sources of information—		
Special field agents, who travel within prescribed territories, each embracing several contiguous States, preferably those having similar soils, climate, and products, and ascertain agricultural conditions by personal observation and by inquiry among leading producers, dealers, consumers, and others who, by reason of business relations or other interests, are well informed on the subjects reported upon.	Special field agents—	Special field agents—
Salaries..... \$32,322.88	Salaries..... \$30,250.00	Salaries..... \$30,250.00
Traveling expenses..... 22,157.89	Traveling expenses.. 25,750.00	Traveling expenses.. 25,750.00
54,480.77	56,000.00	56,000.00
This class includes two agents who devote their entire time and attention to the special crops of rice and tobacco, respectively.		
State statistical agents, who report each for a single State, deriving their information principally from a corps of correspondents, several in each county. They travel through their territories once or twice yearly to ascertain the agricultural conditions by personal observation and inquiry, and incidentally to visit their aids and secure new ones.	State statistical agents—	State statistical agents—
Salaries..... \$26,600.00	Salaries..... \$26,600.00	Salaries..... \$26,600.00
Traveling expenses..... 3,936.12	Traveling expenses 3,600.00	Traveling expenses 3,600.00
30,536.12	30,200.00	30,200.00
County correspondents, about 2,800, who report to the bureau from each county, basing their figures upon personal observation and inquiry, and upon reports from several assistants located in different parts of their respective counties.		
No material compensation is provided for the services of these correspondents other than department publications and seeds.		
Township correspondents, about 30,000 in all, an average of about 10 to each county, who report to the bureau the conditions in their respective localities.		
No compensation other than department publications and seeds.		
All of the above-mentioned classes of correspondents report monthly, giving information appropriate to the season concerning the agricultural products within the respective areas indicated.		
In addition to the above regular lists of correspondents are the following:		
Individual representative farmers, who report once a year concerning the yield of important crops upon their individual farms; and in addition a spring report, relating to the acreage of cotton, is received from those residing in the cotton States.		
Special cotton list of bankers, merchants, etc., reporting twice yearly to the question of acreage in the spring and yield in the fall of cotton.		
Ginners, in the cotton States only, reporting twice a year, to the question of acreage in the spring and yield in the fall of cotton.		
Mills and elevators, reporting once a year, to the question of yield per acre of grain.		
Several lists of large producers of special crops, as tobacco, apples, potatoes, etc. No compensation except publications and seeds.		
Preparation:	Preparation:	Preparation:
The data obtained is compiled and tabulated by the clerical force of the bureau.		
Salaries..... 40,287.18	Salaries..... 40,000.00	Salaries..... 40,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (54 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>General expenses, Bureau of Statistics, 1910, \$117,060—Continued.</i>	<i>General expenses, Bureau of Statistics, 1911, \$115,620—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Publicity: The crop report is published monthly, as quickly as the data can be compiled and tabulated, being given to the public at a stated time through the medium of the telegraph companies and press associations, and as rapidly as possible thereafter through special newspaper correspondents, granges, agricultural journals, etc. It is also published in the bureau's monthly issue of the "Crop Reporter," 130,000 copies of which are mailed as soon as it can be printed after the crop-report figures are available. The cost of publication is borne by the department's appropriation for publications.		
Pro rata cost of administrative and executive expenses... \$16,252.94	Pro rata cost of administrative and executive expenses..... \$18,000.00	Pro rata cost of administrative and executive expenses..... \$18,000.00
Cost of supplies, including office fixtures, stationery and supplies for special field and state statistical agents, envelopes for correspondents' reports, pro rata proportion of stationery, miscellaneous supplies and furniture used in the bureau, etc. 7,511.75	Cost of supplies, including office fixtures, stationery and supplies for special field and state statistical agents, envelopes for correspondents' reports, pro rata proportion of stationery, miscellaneous supplies and furniture used in the bureau, etc. 8,120.00	Cost of supplies, including office fixtures, stationery and supplies for special field and state statistical agents, envelopes for correspondents' reports, pro rata proportion of stationery, miscellaneous supplies and furniture used in the bureau, etc. 7,520.00
Freight, express, telegraph, and telephone charges..... 668.89	Freight, express, telegraph, and telephone charges..... 600.00	Freight, express, telegraph, and telephone charges..... 600.00
Total expenditures for crop report during the year 1909. 149,737.65	Estimated expenditures for crop report during the year 1910..... 152,920.00	Expenditures estimated as necessary for crop report during the year 1911..... 152,320.00
Crop reporter: Cost of editing and preparation of special data..... 1,907.46 An eight-page monthly publication, containing full data, by States, of the crop situation in the United States, showing, in successive months, the acreage, condition, yield, and value of all important crops, and in February the number and value of farm animals, with comparisons for preceding months and years. It contains each month a summary of the crop situation in the principal countries of the world gathered from the official statements of foreign governments, or, when these are not available, from such other sources as are generally recognized as reliable. It is also a vehicle for the dissemination of special statistical data of interest to the agricultural community, as the farm prices of agricultural products and the prices of the same in various trade centers, stocks on hand, exports and imports, production and consumption, etc. The cost of publication is borne by the department's appropriation for that purpose.	Crop reporter: Estimated cost of editing and preparation of special data..... 2,000.00	Crop reporter: Expenditures estimated as necessary for editing and preparation of special data..... 2,000.00
Inquiries, special..... 10,710.97 Requests are received daily from statesmen, executive departments, and bureaus, state and foreign governments, educators, associations, etc., for statistical data not assembled in the form desired or not accessible to the writers. Compliance with such requests involves much research and the preparation of many letters, statements, and tables. This work is inevitably associated with the position of the bureau as the first authority in the United States on agricultural statistics.	Inquiries, special..... 10,000.00	Inquiries, special..... 10,000.00
Investigations, special..... 12,683.75 Investigations into a variety of statistical subjects related to the agricultural interests of the United States are being carried on constantly; many with a view to accumulating material for bureau publications, some for the purpose of testing the accuracy of conclusions derived from other sources, and others to confirm or disprove the value of existing or proposed methods of obtaining statistical data.	Investigations, special..... 15,000.00	Investigations, special..... 15,000.00
Library..... 6,581.34 The bureau's library of agricultural statistics is pre-eminent among similar collections in the United States and probably second to none in the world. Among the most important of its contents are: Annual official statistical reports on the agriculture of foreign governments. Annual statistical and other publications of the departments and bureaus of the United States Government. Annual reports of state boards, departments of agriculture, and state auditors. Annual reports of chambers of commerce and boards of trade. Reports of federal and state censuses. Files of leading trade journals. Files of daily, weekly, or monthly foreign and domestic periodicals, price lists, etc.	Library..... 6,500.00	Library..... 6,500.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Bureau of Statistics—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Collecting agricultural statistics, 1909, \$125,000—Continued.</i>	<i>General expenses, Bureau of Statistics, 1910, \$117,060—Continued.</i>	<i>General expenses, Bureau of Statistics, 1911, \$115,620—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
Yearbook and statistical appendix..... \$7,768.04 Preparation for inclusion in the department's yearbook of articles on matters related to the work of this bureau and of the agricultural statistics contained in the statistical appendix to that publication, including statements showing the production of the principal crops and the numbers of live stock at home and abroad for a period of five years; and, for the United States, the acreage, yield, farm price, and farm value of the same for a long series of years; and, by States, the acreage, production, and farm value, average yield and farm value per acre, and farm price per unit of measure, each year for ten years; the wholesale prices per unit of measure in the principal markets of the United States, monthly, for a period of five years; the exports and imports of the principal crops; similar data for farm animals, and for both vegetable and animal products, as sugar, flour, wool, and hides; transportation rates by rail and water, etc.	Yearbook and statistical appendix..... \$8,000.00	Yearbook and statistical appendix..... \$8,000.00
Work for other bureaus..... 4,220.61 The statistical data accumulated by other bureaus of the department in connection with their investigations are compiled in this bureau when its regular work is not thereby obstructed.	Work for other bureaus..... 4,000.00	Work for other bureaus..... 4,000.00
Cost of producing farm products: Cooperative work with Minnesota State Experiment Station..... 2,359.99 This work has been carried on for several years and is producing fruitful results in showing the detailed cost of producing farm products under a variety of conditions as to soil, location, facilities, and management, and for both diversified and specialized products.	Cost of producing farm products: Cooperative work with Minnesota State Experiment Station..... 2,500.00	Cost of producing farm products: Cooperative work with Minnesota State Experiment Station..... 2,500.00
Grand total..... 214,882.42	Grand total..... 220,920.00	Grand total..... 220,320.00
Total of all appropriations for Bureau of Statistics..... 221,640.00	Total of all appropriations for Bureau of Statistics (a decrease below 1909 of \$720)..... 220,920.00	Total amount estimated for Bureau of Statistics (a decrease below 1910 of \$600)..... 220,320.00
Total expenditures to August 31..... 211,229.84		
Outstanding liabilities on August 31 (estimated)..... 3,652.58		
Balance to be turned back into Treasury (estimated)..... 6,757.58		

LIBRARY.

<i>Salaries, Library, Department of Agriculture, 1909, \$18,080.</i>	<i>Salaries, Library, Department of Agriculture, 1910, \$19,320.</i>	<i>Salaries, Library, Department of Agriculture, 1911, \$19,920.</i>
Barnett, C. R..... Librarian, at \$2,000..... \$2,000.00	1 librarian..... \$2,000.00	1 librarian..... \$2,000.00
Hawks, E. B..... Assistant librarian, at \$1,400..... 1,400.00	1 assistant librarian..... 1,400.00	1 assistant librarian..... 1,400.00
Knapp, A. R..... Clerk, who shall be a translator, at \$1,200..... 1,108.33	2 clerks, class one, one of whom shall be a translator..... 2,400.00	2 clerks, class one, one of whom shall be a translator..... 2,400.00
Upton, G. E..... Cataloguer, at \$1,200..... 1,200.00	2 cataloguers, at \$1,200 each..... 2,400.00	2 cataloguers, at \$1,200 each..... 2,400.00
Sewall, M. L..... Cataloguer, at \$1,200..... 1,200.00	3 cataloguers, at \$1,000 each..... 3,000.00	3 cataloguers, at \$1,000 each..... 3,000.00
Thompson, H. M..... Clerk, at \$1,000..... 75.00	2 clerks, at \$1,000 each..... 2,000.00	2 clerks, at \$1,000 each..... 2,000.00
Leonard, Mabel..... Cataloguer, at \$1,000..... 924.99	4 clerks, at \$900 each..... 3,600.00	4 clerks, at \$900 each..... 3,600.00
Upton, G. E..... Cataloguer, at \$1,000..... 1,000.00	1 clerk..... 840.00	1 clerk..... 840.00
Thompson, M. F..... Cataloguer, at \$1,000..... 1,000.00	1 messenger..... 720.00	1 messenger..... 720.00
Kyrex, M. L..... Clerk, at \$1,000..... 997.22	1 messenger or laborer..... 480.00	1 messenger (by transfer from lump fund)..... 600.00
Crowther, Mary..... Clerk, at \$900..... 900.00	1 charwoman..... 480.00	1 messenger or laborer..... 480.00
Parker, Fannie L..... Clerk, at \$900..... 897.50		1 charwoman..... 480.00
Sewall, Harriet W..... Clerk, at \$900..... 900.00		
Warren, Mary W..... Clerk, at \$900..... 900.00		
Allen, Mary E..... Clerk, at \$840..... 224.00		
Leonard, Mabel..... Clerk, at \$840..... 168.00		
Olcott, Ella M..... Clerk, at \$840..... 63.00		
Stock, Faith G..... Clerk, at \$840..... 273.00		
Wead, Mary Eunice..... Clerk, at \$840..... 56.00		
Allen, Mary E..... Clerk, at \$720..... 34.00		
Olcott, Ella M..... Clerk, at \$720..... 546.00		
Ritchie, Margaret..... Clerk, at \$720..... 82.00		
Gericke, Martha L..... Clerk, at \$720..... 30.00		
Sherwood, Eliz. J..... Clerk, at \$720..... 360.00		
Smith, Paul J..... Clerk, at \$720..... 300.00		
Winningsham, Allie M..... Clerk, at \$720..... 30.00		
Smith, Moses..... Messenger, at \$720..... 720.00		
Sheehan, Frank J..... Messenger, at \$480..... 480.00		
Total..... 17,959.04		
Unexpended balance..... 120.96		
Total amount of above appropriation..... 18,080.00		
The above force performed the following duties:		
Administration: 1 librarian..... \$2,000.00 1 assistant librarian..... 1,400.00 3,400.00	The above force are performing the following duties: Administration: 1 librarian..... \$2,000.00 1 assistant librarian..... 1,400.00 3,400.00	The above force will perform the following duties: Administration: 1 librarian..... \$2,000.00 1 assistant librarian..... 1,400.00 3,400.00
Correspondence, files, and accounts: 1 clerk..... 1,000.00 2 clerks, at \$900 each..... 1,800.00 2,800.00	Correspondence, files, and accounts: 2 clerks, at \$900 each..... \$1,800.00 1 clerk..... 840.00 2,640.00	Correspondence, files, and accounts: 3 clerks, at \$900 each..... 2,700.00

NOTE.—One messenger at \$600 has been added by transfer from the lump fund, and that appropriation has been reduced accordingly.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Library—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Library, Department of Agriculture, 1909, \$18,080—Cont'd.</i>	<i>Salaries, Library, Department of Agriculture, 1910, \$19,320—Continued.</i>	<i>Salaries, Library, Department of Agriculture, 1911, \$19,920—Continued.</i>
The above force performed the following duties—Continued. Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 2 cataloguers, at \$1,200 each..... \$2,400.00 1 clerk (translator)..... 1,200.00 3 cataloguers, at \$1,000 each..... 3,000.00 3 clerks, at \$900 each..... 2,700.00 1 clerk..... 840.00 2 clerks, at \$720 each..... 1,440.00 \$11,580.00	The above force are performing the following duties—Con. Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 2 cataloguers, at \$1,200 each..... \$2,400.00 2 clerks, class 1 (1 of whom is a translator, at \$1,200 each..... 2,400.00 3 cataloguers, at \$1,000 each..... 3,000.00 2 clerks, at \$1,000 each..... 2,000.00 3 clerks, at \$900 each..... 2,700.00 \$12,500.00	The above force will perform the following duties—Cont'd. Cataloguing, indexing, translating, loan-desk work, and care of periodicals: 2 cataloguers, at \$1,200 each..... \$2,400.00 2 clerks, class 1 (1 of whom shall be a translator), at \$1,200 each..... 2,400.00 3 cataloguers, at \$1,000 each..... 3,000.00 2 clerks, at \$1,000 each..... 2,000.00 2 clerks, at \$900 each..... 1,800.00 1 clerk..... 840.00 \$12,440.00
Messengers: 1 messenger..... 720.00 1 messenger..... 480.00 1,200.00	Messengers and charwoman: 1 messenger..... 720.00 1 messenger..... 480.00 1 charwoman..... 480.00 1,680.00	Messengers and charwoman: 1 messenger..... 720.00 1 messenger..... 600.00 1 messenger..... 480.00 1 charwoman..... 480.00 2,280.00
NOTE.—Of the above, 1 clerk at \$900 was detailed from the Office of the Secretary..... 900.00 18,980.00	NOTE.—Of the above, 1 clerk at \$900 is detailed from the Office of the Secretary..... 900.00 20,220.00	NOTE.—Of the above, 1 clerk at \$900 will be detailed from the Office of the Secretary..... 900.00 20,820.00
18,080.00	19,320.00	19,920.00
<i>Library, Department of Agriculture, 1909, \$15,500.</i>	<i>Library, Department of Agriculture, 1910, \$16,500.</i>	<i>Library, Department of Agriculture, 1911, \$15,400.</i>
Books..... \$6,766.94 Subscriptions to periodicals..... 3,069.49 Subscriptions to serials and works published in parts..... 1,243.32 Subscriptions to printed index cards..... 210.77 Miscellaneous supplies..... 489.63 Shelving, furniture, and fittings..... 1,666.47 Traveling expenses..... 17.84 Charwoman..... 460.00 Messenger..... 205.00 Total..... 14,129.46 Outstanding liabilities on August 31, 1909 (estimated)..... 1,191.50 Balance to be turned back in Treasury..... 179.04 Total amount of above appropriation..... 15,500.00	Books..... \$9,200.00 Subscriptions to periodicals..... 3,300.00 Subscriptions to serials and works published in parts..... 1,500.00 Subscriptions to printed index cards..... 300.00 Miscellaneous supplies..... 380.00 Shelving, furniture, and fittings..... 400.00 Traveling expenses..... 100.00 Assistance in care of periodicals..... 720.00 Messenger..... 600.00 Total of appropriation (an increase over 1909 of \$1,000).... 16,500.00	Books..... \$9,000.00 Subscriptions to periodicals..... 3,300.00 Subscriptions to serials and works published in parts..... 1,500.00 Subscriptions to printed index cards..... 300.00 Miscellaneous supplies..... 280.00 Shelving, furniture, and fittings..... 200.00 Traveling expenses..... 100.00 Assistance in care of periodicals..... 720.00 Total amount estimated (a decrease over 1910 of \$1,100). 15,400.00
Total of all appropriations for library..... 33,580.00 Total expenditures to August 31, 1909..... 32,088.50 Outstanding liabilities on August 31, 1909 (estimated)..... 1,191.50 Balance to be turned back in Treasury (estimated)..... 300.00	Total of all appropriations for library (an increase over 1909 of \$2,240)..... 35,820.00	Total amount estimated for library (a decrease from 1910 of \$500)..... 35,320.00
REMARKS.—About four-fifths of the library appropriation for 1909 was spent in the purchase of agricultural, scientific, and technical books and periodicals, reference books and bibliographical material, needed in connection with the work of the department. The remainder was spent in the purchase of supplies, furniture, and fittings, for traveling expenses, and for the salaries of a messenger and charwoman.	REMARKS.—The library appropriation for 1910 is being spent in the purchase of agricultural, scientific, and technical books and periodicals, reference books and bibliographical material needed in connection with the work of the department, in the purchase of supplies, furniture, and fittings, in the payment of the salary of a messenger, and for assistance in the care of periodicals.	REMARKS.—The library appropriation for 1911 will be spent in the purchase of agricultural, scientific, and technical books and periodicals, reference books and bibliographical material needed in connection with the work of the department, in the purchase of supplies, furniture, and fittings, and for traveling expenses. In addition, on account of the increase in the work of the library, it will probably be necessary to employ an additional assistant.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

OFFICE OF THE CHIEF CLERK.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Contingent expenses, Department of Agriculture, 1909, \$83,800.</i>	<i>Contingent expenses, Department of Agriculture, 1910, \$80,000.</i>	<i>Contingent expenses, Department of Agriculture, 1911, \$100,000.</i>
Lump fund salaries in Washington..... \$48.00	Lump fund salaries outside of Washington..... \$600.00	Lump fund salaries outside of Washington..... \$600.00
Lump fund salaries outside of Washington..... 400.00	Stationery..... 12,000.00	Stationery..... 12,500.00
Stationery..... 11,139.35	Miscellaneous supplies and services, equipment, material, etc..... 37,485.00	Miscellaneous supplies and services, equipment, material, etc..... 40,800.00
Furniture..... 1,640.44	Furniture..... 1,700.00	Furniture..... 1,800.00
Fuel..... 11,527.41	Fuel..... 20,000.00	Fuel..... 23,000.00
Freight..... 84.48	Freight..... 40.00	Freight..... 50.00
Express..... 186.51	Express..... 225.00	Express..... 250.00
Telegraph..... 92.10	Telegraph..... 125.00	Telegraph..... 150.00
Telephone..... 781.61	Telephone..... 825.00	Telephone..... 850.00
Rent..... 7,939.94	Rent..... 8,500.00	Rent..... 8,500.00
Gas and electricity..... 7,390.76	Gas and electricity..... 13,000.00	Gas and electricity..... 19,000.00
Traveling expenses..... 1,478.22	Traveling expenses..... 1,500.00	Traveling expenses..... 1,500.00
Total expenditures to August 31, 1909..... 96,494.03	Total..... 96,000.00	Total..... 109,000.00
Outstanding liabilities on August 31, 1909 (estimated)..... 1,539.57		
Balance to be turned back into Treasury (estimated)..... 400.00		
Total amount available..... 98,433.60		
Deduct amount of repayments to credit of appropriation made through Treasury Department on account of supplies and material furnished to the different bureaus by the chief of supply division and the chief engineer, the same having been originally purchased out of above-named appropriation:	Deduct estimated amount of repayments on account of supplies and material furnished by chief of supply division and chief engineer:	Deduct estimated amount of repayments on account of supplies furnished by chief of supply division:
Chief of supply division..... \$8,306.59	Chief of supply division \$8,500.00	Chief of supply division..... 9,000.00
Chief engineer..... 3,927.01	Chief engineer..... 7,500.00	
Total amount of regular appropriation..... 86,200.00	Total amount of appropriation (a decrease from 1909 of \$6,200)..... 80,000.00	Total amount estimated (an apparent increase over 1910 of \$20,000)..... 100,000.00
<i>Remarks.</i> —All supplies for the use of the Office of the Secretary, the Assistant Secretary, the Chief Clerk, the file room, the supply division, the chief engineer, as well as all offices not coming directly under an independent division or bureau are paid from above appropriation. During the fiscal year 1909 the mechanical shop building was completed at a cost of \$24,860.19, and the task of assembling all mechanical work was immediately begun. It was soon discovered that the appropriation would not permit of furnishing to the various bureaus the material needed by them, and beginning with February 1, 1909, they were charged with the cost of the material, such accounts being settled through the Treasury Department in the amount of \$3,927.01. In addition to the cost of mechanical shop building mentioned above, other expenses not specifically named for the fiscal year 1909 include postage \$2,500, ice \$1,730.55, forage \$1,890.31, washing towels \$429.25, laying underground conduit for steam pipes connecting the new mechanical shop building and greenhouses with the power house of the department, \$4,600.00, alterations in basement of main building \$1,110.00, alterations in building occupied jointly by bureaus of Entomology and Biological Survey, \$650, also charges for rental of fire-alarm boxes, advertisements in connection with annual contracts for supplies, repairs to buildings, etc.	<i>Remarks.</i> —There is an apparent decrease over 1909 of \$6,200, but as the provision for the construction of a new mechanical shop building included in the appropriation for 1909 is omitted, there is an actual increase of \$18,800. This amount is necessary as it is the intention to pay from this appropriation the fuel, electric current, gas, laundry, etc., used by the various bureaus in the main department as far as the appropriation will permit. During the fiscal year 1909 the Bureau of Animal Industry paid \$3,489.92 for fuel and \$1,510.08 for electric current; the Bureau of Plant Industry, \$2,484.33 for fuel and \$1,515.68 for electric current; and the Bureau of Soils, \$1,000 for electric current, all used in the new buildings. During the fiscal year 1911 this expense will all be paid from the above appropriation, together with an increased amount due to occupying the new building for the Bureau of Chemistry, and several new greenhouses recently constructed.	<i>Remarks.</i> —The above increase is only an apparent one, as the amount thereof, \$20,000, has been deducted from the appropriations of the several bureaus and divisions. This amount is necessary to continue the plan of paying from this appropriation all fuel, electric current, ice, laundry, gas, repairs to buildings, and all incidental work, and is in conformity with the plan of centralizing all mechanical work under one head. Beginning with July 1, 1910, the bureaus and divisions will not be charged for any material furnished by the new mechanical shop building.

OFFICE OF EXPERIMENT STATIONS.

<i>Salaries, Office of Experiment Stations, 1909, \$34,620.</i>	<i>Salaries, Office of Experiment Stations, 1910, \$39,260.</i>	<i>Salaries, Office of Experiment Stations, 1911, \$46,180.</i>
True, A. C..... Director, at \$3,500..... \$3,500.00	1 director..... \$4,000.00	1 director..... \$4,000.00
Johnson, C. E..... Chief clerk, at \$1,800..... 1,800.00	1 chief clerk..... 1,800.00	1 chief clerk..... 1,800.00
Henry, William..... Clerk and proof reader, at \$1,600..... 1,600.00	1 clerk and proof reader..... 1,600.00	1 draftsman (by transfer from lump fund for drainage)..... 1,800.00
Bartholow, F. A..... Clerk, class two..... 1,400.00	5 clerks, class two..... 7,000.00	1 clerk and proof reader..... 1,600.00
Harlow, G. A..... Clerk, class two..... 1,400.00	5 clerks, class one..... 6,000.00	1 editorial clerk (by transfer from lump fund for general expenses)..... 1,400.00
Ryder, Mary E..... Clerk, class two..... 1,400.00	5 clerks, at \$1,000 each..... 5,000.00	1 editorial clerk (by transfer from lump fund for irrigation)..... 1,200.00
Sommers, S. L..... Clerk, class two..... 1,400.00	3 clerks, at \$900 each..... 2,700.00	5 clerks, class two..... 7,000.00
Spethmann, Marie T..... Clerk, class two..... 1,400.00	5 clerks, at \$840 each..... 4,200.00	6 clerks, class one (increase of one by transfer from lump fund for irrigation)..... 7,200.00
Colbath, Mary F..... Clerk, class one..... 1,200.00	1 clerk or messenger..... 840.00	5 clerks, at \$1,000 each..... 5,000.00
Nau, K. A..... Clerk, class one..... 1,200.00	1 messenger or caretaker..... 720.00	3 clerks, at \$900 each..... 2,700.00
Rowley, B. M..... Clerk, class one..... 50.00	3 clerks or messengers, at \$600 each..... 1,800.00	6 clerks, at \$840 each (increase of one by transfer from lump fund for irrigation)..... 5,040.00
Vance, Miriam C..... Clerk, class one..... 1,150.00	1 messenger or laborer..... 480.00	1 clerk or messenger..... 840.00
Sweetnam, M. V..... Clerk, class one..... 1,200.00	1 copyist or laborer..... 720.00	1 clerk or messenger (in lieu of one messenger or caretaker)..... 720.00
Agnew, M. A..... Clerk, at \$1,000..... 1,000.00	4 laborers or charwomen, at \$480 each..... 1,920.00	3 clerks or messengers, at \$600 each..... 1,800.00
Daish, W. M..... Clerk, at \$1,000..... 1,000.00	2 laborers or charwomen, at \$240 each..... 480.00	2 messengers or laborers, at \$450 each (increase of one by transfer from lump fund for irrigation)..... 960.00
Emerson, Edith O..... Clerk, at \$1,000..... 1,000.00	Total amount of above appropriation (an increase over 1909 of \$1,640)..... 39,260.00	1 copyist or laborer..... 720.00
Maddux, S. K..... Clerk, at \$1,000..... 1,000.00		4 laborers or charwomen, at \$480 each..... 1,920.00
Resch, Antoinette..... Clerk, at \$1,000..... 958.34		2 laborers or charwomen, at \$240 each..... 480.00
Vance, Miriam C..... Clerk, at \$900..... 41.67		Total amount estimated (an apparent increase over 1910 of \$6,920)..... 46,180.00
Garland, M. O..... Clerk, at \$900..... 900.00		<i>NOTE.</i> —One draftsman at \$1,800, one editorial clerk at \$1,400, one editorial clerk at \$1,200, one clerk at \$1,200, one clerk at \$840,
Hanna, Jane..... Clerk, at \$900..... 862.50		
Resch, Antoinette..... Clerk, at \$840..... 37.50		
Armstrong, Jessie V..... Clerk, at \$840..... 331.33		
Figg, Beulah..... Clerk, at \$840..... 508.67		
Crain, A. C..... Clerk, at \$840..... 840.00		
Henderson, Alice K..... Clerk, at \$840..... 840.00		
Tallent, G. A..... Clerk, at \$840..... 340.67		
Todd, F. W..... Clerk, at \$840..... 499.33		
Eidsness, Lars M..... Messenger, at \$840..... 840.00		
Nelson, Henry A..... Messenger, at \$720..... 720.00		
Lehmann, William G..... Messenger, at \$600..... 600.00		
Hoffman, G. L..... Messenger, at \$480..... 480.00		
Brown, Ralph W..... Messenger, at \$480..... 40.00		
Collins, Joshua B..... Messenger, at \$480..... 294.67		
Dalrymple, J. M..... Messenger, at \$480..... 80.00		
Elliott, John L..... Messenger, at \$480..... 30.67		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Salaries, Office of Experiment Stations, 1909, \$34,620—Continued.</i>	<i>Salaries, Office of Experiment Stations, 1910, \$39,260—Continued</i>	<i>Salaries, Office of Experiment Stations, 1911, \$46,180—Continued.</i>
Brown, Ralph W. \$30.67 Mansuy, J. S. 440.00 Paladini, Louis C. 9.33 Webster, Nimia Copyist, at \$720. 720.00 Garvey, Mary C. Laborer, at \$480. 480.00 Moriarty, Mary A. Laborer, at \$480. 480.00 Noone, Sarah A. Laborer, at \$480. 480.00 Total 34,585.35 Unexpended balance 34.65 Total amount of above appropriation <u>34,620.00</u> The above force performed the following duties: General administration of the office in its relations with agricultural experiment stations, agricultural colleges and schools, farmers' institutes, and investigations on nutrition, irrigation, and drainage; keeping of accounts, and care of office rooms: Director 3,500.00 Chief clerk 1,800.00 1 clerk, class two 1,400.00 1 clerk 1,000.00 2 clerks, \$900 each 1,800.00 1 clerk 840.00 1 messenger 720.00 1 messenger 480.00 3 laborers, \$480 each 1,440.00 Total <u>12,980.00</u> Preparation of experiment-station record, annual report to Congress, bulletins, circulars, etc.: Clerk and proof reader 1,600.00 2 clerks, class two 2,800.00 2 clerks, class one 2,400.00 2 clerks, \$1,000 each 2,000.00 1 messenger 480.00 Total <u>9,280.00</u> Correspondence, files, distribution of publications, card index of station publications, care of property, movement of field instruments, and miscellaneous clerical work, including assignment and care of civil-service papers sent to the department for marking: 2 clerks, class two 2,800.00 2 clerks, class one 2,400.00 2 clerks, \$1,000 each 2,000.00 4 clerks, \$840 each 3,360.00 1 copyist 720.00 1 messenger 600.00 1 messenger 480.00 Total <u>12,360.00</u> Total <u>34,620.00</u> Agricultural experiment stations, 1909, \$123,800. General expenses (\$30,000): Salaries— In Washington \$23,213.38 Out of Washington 300.00 Stationery 876.57 Miscellaneous supplies and services, equipment, books, machinery, etc. 1,738.92 Furniture 764.58 Freight 83.10 Express 88.51 Telegraph 38.61 Telephone 39.35	The above force are performing the following duties: General administration of the office in its relations with agricultural experiment stations, agricultural colleges and schools, farmers' institutes, and investigations on nutrition, irrigation, and drainage; general and cost accounting, and care of office rooms: Director \$4,000.00 Chief clerk 1,800.00 1 clerk, class two 1,400.00 1 clerk 1,000.00 2 clerks, \$900 each 1,800.00 2 clerks, \$840 each 1,680.00 1 messenger or caretaker 720.00 1 clerk or messenger 600.00 4 laborers or charwomen, at \$480 each 1,920.00 2 laborers or charwomen, at \$240 each 480.00 Total <u>15,400.00</u> Preparation of experiment-station record, annual report to Congress, bulletins, circulars, etc.: Clerk and proof reader 1,600.00 2 clerks, class two 2,800.00 2 clerks, class one 2,400.00 2 clerks, \$1,000 each 2,000.00 1 clerk or messenger 600.00 1 messenger or laborer 480.00 Total <u>9,880.00</u> Correspondence, files, distribution of publications, card index of station publications, care of property, movement of field instruments, and miscellaneous clerical work, including assignment and care of civil-service papers sent to the department for marking: 2 clerks, class two 2,800.00 3 clerks, class one 3,600.00 2 clerks, \$1,000 each 2,000.00 1 clerk 900.00 3 clerks, \$840 each 2,520.00 1 clerk or messenger 840.00 1 clerk or messenger 600.00 1 copyist or laborer 720.00 Total <u>13,980.00</u> Total <u>39,260.00</u> Agricultural experiment stations, 1910, \$143,800. General expenses (\$34,800): Salaries— In Washington \$27,500.00 Out of Washington 300.00 Stationery 400.00 Miscellaneous supplies and services, equipment, books, machinery, etc. 1,750.00 Furniture 500.00 Freight 10.00 Express 25.00 Telegraph 25.00	and one messenger or laborer at \$480, aggregating \$6,920, have been added by transfer from the lump fund appropriations and those appropriations reduced accordingly. The title of one messenger or caretaker at \$720 is changed to one clerk or messenger at \$720. The above force will perform the following duties: General administration of the office in its relations with agricultural experiment stations, agricultural colleges and schools, farmers' institutes, and investigations on nutrition, irrigation, and drainage; general and cost accounting, and care of office rooms: Director \$4,000.00 Chief clerk 1,800.00 1 draftsman 1,800.00 1 editorial clerk 1,200.00 1 clerk, class two 1,400.00 1 clerk, class one 1,200.00 1 clerk 1,000.00 2 clerks, \$900 each 1,800.00 3 clerks, \$840 each 2,520.00 1 clerk or messenger 720.00 1 clerk or messenger 600.00 4 laborers or charwomen, at \$480 each 1,920.00 2 laborers or charwomen, at \$240 each 480.00 Total <u>20,440.00</u> Preparation of experiment-station record, annual report to Congress, bulletins, circulars, etc.: Clerk and proof reader 1,600.00 1 editorial clerk 1,400.00 2 clerks, class two 2,800.00 2 clerks, class one 2,400.00 2 clerks, \$1,000 each 2,000.00 1 clerk or messenger 600.00 1 messenger or laborer 480.00 Total <u>11,280.00</u> Correspondence, files, distribution of publications, card index of station publications, care of property, movement of field instruments, and miscellaneous clerical work, including assignment and care of civil-service papers sent to the department for marking: 2 clerks, class two 2,800.00 3 clerks, class one 3,600.00 2 clerks, \$1,000 each 2,000.00 1 clerk 900.00 3 clerks, \$840 each 2,520.00 1 clerk or messenger 840.00 1 clerk or messenger 600.00 1 messenger or laborer 480.00 One copyist or laborer 720.00 Total <u>14,460.00</u> Total <u>46,180.00</u> Agricultural experiment stations, 1911, \$142,400. General expenses (\$33,400): Salaries— In Washington \$27,000.00 Out of Washington 300.00 Stationery 400.00 Miscellaneous supplies and services, equipment, books, machinery, etc. 1,550.00 Furniture 500.00 Freight 10.00 Express 25.00 Telegraph 25.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Agricultural experiment stations, 1909, \$123,000—Continued.</i>	<i>Agricultural experiment stations, 1910, \$143,800—Continued.</i>	<i>Agricultural experiment stations, 1911, \$142,400—Continued.</i>
General expenses—Continued.	General expenses—Continued.	General expenses—Continued.
Apparatus, instruments, and laboratory material..... \$26.83	Telephone..... \$15.00	Telephone..... \$15.00
Travel and station and field expenses..... 2,231.13	Apparatus, instruments, and laboratory material..... 75.00	Apparatus, instruments, and laboratory material..... 75.00
Total expenditures to August 31, 1909..... 29,400.98	Travel and station and field expenses..... 4,200.00	Travel and station and field expenses..... 3,500.00
Outstanding liabilities on August 31, 1909 (estimated)..... 494.27	Total amount for general expenses (an apparent increase of \$4,800 over 1909)..... 34,800.00	Total amount for general expenses (an apparent decrease from 1910 of \$1,400)..... 33,400.00
Balance to be turned back in Treasury (estimated)..... 104.75		
30,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of section 3 of an act of March 2, 1887, and sections 2, 4, and 5 of an act approved March 16, 1906, and covered the following work:	NOTE.—The above estimated expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are necessary to carry out the provisions of section 3 of the act of March 2, 1887, and sections 2, 4, and 5 of an act approved March 16, 1906, and will include the following work:	NOTE.—Apparent decrease, \$1,400, but adding the salaries of places transferred to the statutory roll, amounting to \$1,400, the total estimate is the same.
Supervision of the work and expenditures of 56 agricultural experiment stations in 48 States and Territories, and Alaska, Hawaii, Porto Rico, and island of Guam, and promotion of their general interest. The preparation of 51 publications based on the work of over 1,000 agricultural experiment stations and kindred institutions throughout the world, and 1,000 cards of the index of experiment station literature. Preparation of 5,336 summaries of the reports of agricultural investigations made by the agricultural experiment stations and kindred institutions in the United States and 50 other countries, in order to give prompt information regarding such investigations to the workers in similar lines in this department and the agricultural experiment stations and to teachers and students in the agricultural colleges and schools. This information is published monthly in the Experiment Station Record. This journal also contains articles suggesting lines of work for the stations and advice regarding their work and management as required.	Supervision of the work and expenditures of 56 agricultural experiment stations in 48 States and Territories, and Alaska, Hawaii, Porto Rico, and Guam, and promotion of their general interests. The preparation of publications based on the work of over 1,000 agricultural experiment stations and kindred institutions throughout the world, and cards of the index of experiment station literature. Preparation of summaries of the reports of agricultural investigations made by the agricultural experiment stations and kindred institutions in the United States and other countries, in order to give prompt information regarding such investigations to the workers in similar lines in this department and the agricultural experiment stations and to teachers and students in the agricultural colleges and schools. This information is published monthly in the Experiment Station Record. This journal will also contain articles and advice regarding their work and management as required.	NOTE.—The above estimated expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, are necessary to carry out the provisions of section 3 of the act of March 2, 1887, and sections 2, 4, and 5 of an act approved March 16, 1906, and will include the following work:
		Supervision of the work and expenditures of 56 agricultural experiment stations in 48 States and Territories, and Alaska, Hawaii, Porto Rico, and the island of Guam, and promotion of their general interests. The preparation of publications based on the work of over 1,000 agricultural experiment stations and kindred institutions throughout the world, and cards of the index of experiment station literature. Preparation of summaries of the reports of agricultural investigations made by the agricultural experiment stations and kindred institutions in the United States and other countries, in order to give prompt information regarding such investigations to the workers in similar lines in this department and the agricultural experiment stations and to teachers and students in the agricultural colleges and schools. This information is published monthly in the Experiment Station Record. This journal will also contain articles suggesting lines of work for the stations and advice regarding their work and management as required.
Alaska Experiment Station (\$26,000):	Alaska Experiment Station (\$28,000):	Alaska Experiment Station (\$28,000):
Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., and introduction of live stock for experimental purposes.	Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., and introduction of live stock for experimental purposes.	Maintenance of a central experiment station and four branch stations to investigate the agricultural and horticultural resources of Alaska, development of animal industry, dairying, etc., and introduction of live stock for experimental purposes.
Salaries..... 11,554.17	Salaries..... 13,000.00	Salaries..... 13,000.00
Labor..... 6,662.13	Labor..... 6,500.00	Labor..... 6,500.00
Travel..... 845.94	Travel..... 1,000.00	Travel..... 1,000.00
Freight, express, etc..... 722.39	Freight, express, etc..... 1,000.00	Freight, express, etc..... 1,000.00
Supplies, etc..... 6,212.98	Supplies, etc..... 6,500.00	Supplies, etc..... 6,500.00
Total..... 25,997.61	Total..... 28,000.00	Total..... 28,000.00
Balance, September 30, 1909..... 2.39		
26,000.00		
Hawaii Experiment Station (\$26,000):	Hawaii Experiment Station (\$28,000):	Hawaii Experiment Station (\$28,000):
Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc.	Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc.	Maintenance of an experiment station at which studies are made on diversified agriculture with reference to the peculiar needs of the country, and scientific investigations in agronomy, chemistry, entomology, horticulture, etc.
Salaries..... 16,497.96	Salaries..... 18,000.00	Salaries..... 18,000.00
Labor..... 2,934.24	Labor..... 4,000.00	Labor..... 4,000.00
Travel..... 528.08	Travel..... 500.00	Travel..... 500.00
Freight, express, etc..... 163.75	Freight, express, etc..... 500.00	Freight, express, etc..... 500.00
Supplies, etc..... 5,350.33	Supplies, etc..... 5,000.00	Supplies, etc..... 5,000.00
Total..... 25,474.36	Total..... 28,000.00	Total..... 28,000.00
Balance, September 30, 1909..... 525.64		
26,000.00		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Agricultural experiment stations, 1909, \$125,000—Continued.</i>	<i>Agricultural experiment stations, 1910, \$143,800—Continued.</i>	<i>Agricultural experiment stations, 1911, \$142,400—Continued.</i>
Porto Rico Experiment Station (\$26,000):	Porto Rico Experiment Station (\$28,000):	Porto Rico Experiment Station (\$28,000):
Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.	Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.	Maintenance of a station to carry on experiments in agronomy, entomology, horticulture, coffee culture, and scientific investigations along various lines of agriculture.
Salaries.....\$12,250.93	Salaries.....\$16,000.00	Salaries.....\$16,000.00
Labor.....6,624.24	Labor.....6,000.00	Labor.....6,000.00
Travel.....808.44	Travel.....750.00	Travel.....750.00
Freight, express, etc.....570.41	Freight, express, etc.....500.00	Freight, express, etc.....500.00
Supplies, etc.....5,735.98	Supplies, etc.....4,750.00	Supplies, etc.....4,750.00
Total.....26,000.00	Total.....28,000.00	Total.....28,000.00
Guam Experiment Station (\$5,000):	Guam Experiment Station (\$15,000):	Guam Experiment Station (\$15,000):
To investigate and report to Congress on the agricultural resources and capabilities of Guam with special reference to the location of an agricultural experiment station and the determination of the character and extent of agricultural experiments immediately demanded by the agriculture of the island.	To equip and maintain an agricultural experiment station on the island of Guam for the purpose of carrying on experiments in agronomy, horticulture, animal husbandry, etc.	Equipment and maintenance of a station to carry on experiments in agronomy, horticulture, animal husbandry, etc.
Salaries.....1,306.66	Salaries.....4,000.00	Salaries.....5,500.00
Labor.....940.61	Labor.....2,000.00	Labor.....3,500.00
Travel.....689.20	Travel.....500.00	Travel.....500.00
Freight, express, etc.....14.85	Freight, express, etc.....500.00	Freight, express, etc.....500.00
Supplies, implements, machinery, etc.....2,015.48	Supplies, implements, etc.....6,500.00	Supplies, implements, etc.....5,000.00
Total.....4,966.80	Rent of land.....200.00	Total.....15,000.00
Balance, September 30, 1909.....33.20	Purchase of land.....1,300.00	
Total.....5,000.00	Total.....15,000.00	
Farmers' institutes (\$10,000):	Farmers' institutes (\$10,000):	Farmers' institutes (\$10,000):
Salaries (in Washington).....6,104.73	Salaries (in Washington).....8,000.00	Salaries (in Washington).....8,000.00
Stationery.....269.37	Stationery.....100.00	Stationery.....100.00
Miscellaneous supplies and services, equipment, books, machinery, etc.....1,152.15	Miscellaneous supplies and services, equipment, books, machinery, etc.....250.00	Miscellaneous supplies and services, equipment, books, machinery, etc.....300.00
Furniture.....283.07	Furniture.....150.00	Furniture.....250.00
Express.....4.25	Express.....10.00	Express.....10.00
Telegraph.....5.39	Telegraph.....10.00	Telegraph.....10.00
Telephone......10	Apparatus, instruments, and laboratory material.....80.00	Apparatus, instruments, and laboratory material.....130.00
Apparatus, instruments, and laboratory material.....13.30	Travel and station and field expenses.....1,400.00	Travel and station and field expenses.....1,200.00
Travel and station and field expenses.....1,074.92	Total.....10,000.00	Total.....10,000.00
Total expenditures to August 31, 1909.....8,907.28	Total amount of above appropriation.....143,800.00	Total amount estimated.....142,400.00
Outstanding liabilities on August 31, 1909.....1,081.30		
Balance to be turned back in Treasury (estimated).....11.42		
Total.....10,000.00		
Total amount of above appropriation.....123,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1909, the work including investigations and reports upon the organization and progress of farmers' institutes and agricultural schools in the several States and Territories and similar organizations in foreign countries and suggestions as to plans and methods for making such organizations more effective for the dissemination of the results of the work of the Department of Agriculture and the agricultural experiment stations and of improved methods of agricultural practice.		
Nutrition investigations, 1909 (\$7,000):		
Salaries (in Washington).....4,660.99	Nutrition investigations, 1910 (\$10,000):	Nutrition investigations, 1911 (\$10,000):
Stationery.....4.58	Salaries (in Washington).....6,000.00	Salaries (in Washington).....6,000.00
Miscellaneous supplies and services, equipment, books, machinery, etc.....1,307.11	Miscellaneous supplies and services, furniture, equipment, books, machinery, etc.....1,500.00	Miscellaneous supplies and services, furniture, equipment, books, machinery, etc.....1,000.00
Furniture.....157.53	Freight.....15.00	Freight.....15.00
Freight.....31.76	Express.....30.00	Express.....30.00
Express.....1.90	Telegraph.....5.00	Telegraph.....5.00
Telegraph......81	Telephone.....6.00	Telephone.....6.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Agricultural experiment stations, 1909, \$125,000—Continued.</i>	<i>Agricultural experiment stations, 1910, \$143,800—Continued.</i>	<i>Agricultural experiment stations, 1911, \$142,400—Continued.</i>
Nutrition investigations, 1909 (\$7,000)—Continued.	Nutrition investigations, 1910 (\$10,000)—Continued.	Nutrition investigations, 1911 (\$10,000)—Continued.
Telephone..... \$4.50	Apparatus, instruments, and laboratory material..... \$2,144.00	Apparatus, instruments, and laboratory material..... \$2,044.00
Apparatus, instruments, and laboratory material..... 676.57	Travel and station and field expenses..... 300.00	Travel and station and field expenses..... 300.00
Travel and station and field expenses..... 149.28		
Total expenditures to August 31, 1909..... 6,995.03	Total amount of above appropriation..... 10,000.00	Total amount estimated... 10,000.00
Balance to be turned back in Treasury (estimated)..... 4.97		
Total amount of above appropriation..... 7,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1909 providing for setting up and completing apparatus, the property of the Government and used in the nutrition investigations, and the preparation for publication of the results already obtained.	NOTE.—The above proposed expenditures, classified in accordance with the suggestion of the congressional committee on expenditures, are estimated as being necessary to enable the Secretary of Agriculture to investigate and report on the nutritive value of agricultural products used for human food with special suggestions of plans and methods for the more effective utilization of such products and the dissemination of useful information on this subject, including employment of assistants, clerks, and other persons in the city of Washington and elsewhere, and such other expenses as may be necessary in the conduct of these investigations.	NOTE.—The above estimated expenditures, classified in accordance with the suggestion of the congressional committee on expenditures, have been submitted as necessary to enable the Secretary of Agriculture to investigate and report on the nutritive value of agricultural products used for human food, with special suggestions of plans and methods for the more effective utilization of such products and the dissemination of useful information on this subject, including employment of assistants, clerks, and other persons in the city of Washington or elsewhere, and such other expenses as may be necessary in the conduct of these investigations.
<i>Irrigation and drainage investigations, 1909, \$150,000.</i>	<i>Irrigation investigations, 1910, \$75,000.</i>	<i>Irrigation investigations, 1911, \$70,380.</i>
Salaries:	Salaries:	Salaries:
In Washington..... \$29,680.85	In Washington..... \$18,000.00	In Washington..... \$18,000.00
Out of Washington..... 71,401.90	Out of Washington..... 35,000.00	Out of Washington..... 30,000.00
Stationery..... 1,745.82	Stationery..... 500.00	Stationery..... 500.00
Miscellaneous supplies and services, equipment, books, machinery, etc..... 9,844.25	Miscellaneous supplies and services, equipment, books, machinery, etc..... 2,438.00	Miscellaneous supplies and services, equipment, books, machinery, etc..... 2,592.00
Furniture..... 1,481.18	Furniture..... 1,000.00	Furniture..... 1,000.00
Freight..... 239.92	Freight..... 100.00	Freight..... 100.00
Express..... 347.61	Express..... 50.00	Express..... 50.00
Telegraph..... 112.42	Telegraph..... 50.00	Telegraph..... 50.00
Telephone..... 27.90	Telephone..... 10.00	Telephone..... 36.00
Rent..... 1,104.00	Rent..... 1,852.00	Rent..... 1,852.00
Gas and electricity..... 10.95	Apparatus, instruments, and laboratory material..... 1,000.00	Apparatus, instruments, and laboratory material..... 1,200.00
Apparatus, instruments, and laboratory material..... 1,368.51	Travel and station and field expenses..... 15,000.00	Travel and station and field expenses..... 15,000.00
Travel and station and field expenses..... 30,670.73		
Total expenditures to August 31, 1909..... 148,036.04	Total amount of above appropriation..... 75,000.00	Total amount estimated (an apparent decrease from 1910 of \$4,620)..... 70,380.00
Total amount of above appropriation..... 150,000.00		
Total expenditures under above groups..... 148,036.04		
Unexpended balance..... 1,963.96		NOTE.—Apparent decrease \$4,620, but adding the salaries of places transferred to the statutory roll, amounting to \$4,620, the total estimate is the same.
Repayments to credit of appropriation..... 7.25		
Net unexpended balance..... 1,971.21		
Outstanding liabilities on August 31, 1909 (estimated)..... 1,554.78		
Balance to be turned back in Treasury (estimated)..... 416.43		
Total amount of above appropriation..... 150,000.00		
NOTE.—The above expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, were necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1909, enabling the Secretary of Agriculture to investigate and report upon the laws affecting irrigation, etc., the expenditures by States for this work being as follows:	NOTE.—The above proposed expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, will be necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1910, enabling the Secretary of Agriculture to investigate and report upon the laws of the States and Territories as affecting irrigation and the rights of riparian proprietors and institutions relating to irrigation, and upon the use of irrigation waters, at home and abroad, with especial suggestions of the best methods for the utilization of irrigation waters in agriculture, and upon the use of different kinds of power and appliances for irrigation, and for the preparation and illustration of reports and bulletins on irrigation, etc. The proposed expenditures by States for this work is as follows:	NOTE.—The above estimates, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary to enable the Secretary of Agriculture to complete and report upon investigations now in progress and for the continuation and extension of the work to different localities. The proposed expenditures by States for this work is as follows:
Arid States (in general)..... 8,475.84	Arid States (in general)..... 5,400.00	Arid States (in general)..... 5,000.00
Arizona..... 1,548.95	Arizona..... 2,800.00	Arizona..... 3,000.00
Arkansas..... 14,823.28	California..... 8,750.00	California..... 7,000.00
Atlantic coast States (in general)..... 652.38	Colorado..... 3,350.00	Colorado..... 4,100.00
California..... 7,617.42	Humid States (in general)..... 3,000.00	Humid States (in general)..... 3,500.00
Colorado..... 10,176.06	Idaho..... 7,500.00	Idaho..... 4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1902, \$150,000—Continued.</i>	<i>Irrigation investigations, 1910, \$75,000—Cont'd.</i>	<i>Irrigation investigations, 1911, \$70,330—Cont'd.</i>
Delaware and Maryland..... \$1,362.96	Iowa..... \$400.00	Iowa (allotment included under Humid States).....
Florida..... 779.03	Kansas..... 700.00	Kansas and Oklahoma..... \$1,200.00
Georgia..... 1,131.21	Louisiana, Texas, and Arkansas.... 2,200.00	Louisiana, Texas, and Arkansas.... 2,000.00
Humid States (in general)..... 2,728.23	Minnesota..... 400.00	Minnesota (allotment included under Humid States).....
Idaho..... 2,258.54	Montana..... 200.00	Montana..... 1,250.00
Illinois..... 3,311.41	Nevada..... 1,000.00	Nebraska..... 1,250.00
Indiana..... 6.00	New Mexico..... 1,500.00	Nevada..... 1,000.00
Iowa..... 400.00	North Dakota..... 200.00	New Mexico..... 1,000.00
Kansas..... 1,486.96	Oregon..... 3,500.00	North Dakota..... 1,250.00
Louisiana..... 1,478.47	Texas..... 3,000.00	Oregon..... 4,000.00
Louisiana, Texas, and Arkansas..... 1,315.69	Utah..... 1,600.00	South Dakota..... 1,250.00
Minnesota..... 119.80	Washington..... 3,550.00	Texas..... 3,500.00
Mississippi..... 3,223.36	Wyoming..... 6,050.00	Utah..... 2,500.00
Montana..... 1,153.90	Advisory and consulting irrigation field work..... 5,000.00	Washington..... 4,000.00
Nebraska..... 6,950.36		Wyoming..... 6,300.00
Nevada..... 1,000.00		Advisory and consulting irrigation field work..... 2,700.00
New Mexico..... 1,576.27		
North Carolina..... 7,300.66		
North Dakota..... 55.85		
Oklahoma..... 1,268.11		
Oregon..... 4,128.50		
South Carolina..... 1,174.30		
South Dakota..... 1,998.35		
Texas..... 3,725.97		
Utah..... 6,442.60		
Washington..... 3,992.86		
Wyoming..... 10,827.44		
Advisory and consulting irrigation field work..... 7,810.48		
Advisory and consulting drainage field work and special scientific investigations..... 6,667.79		
128,969.33	60,100.00	59,800.00
PROJECTS.	PROJECTS.	PROJECTS.
The expenditures in connection with the investigations have been distributed largely among definite projects, the object and cost of each being as stated below:	The expenditures in connection with the investigations will be distributed largely among definite projects, the object and estimated cost of each being as stated below:	The proposed expenditures in connection with the investigations will be distributed largely among definite projects, the object and estimated cost of each being as stated below:
<i>On the use of water in irrigation and technical investigations.</i>	<i>On the use of water in irrigation and technical investigations.</i>	<i>On the use of water in irrigation and technical investigations.</i>
Technical investigations included studies of losses of irrigation water and means of checking and preventing them carried on in sections where development had reached the limit of the water supply under present practice and extension of the irrigated area depended upon a more economical use of water; relation of the quantity of water used and stage of plant growth at which applied to yield and quantity of crops, carried on mainly in cooperation with state experiment stations; adaptation of methods of applying water to different types of soil and different crops.	The technical investigations will include studies of the losses of irrigation water and the means of checking and preventing them; adaptation of methods of applying water to different types of soil and different crops, carried on chiefly in cooperation with the state experiment stations; practical tests of engines and windmills used in pumping water for irrigation; investigations of the use of water in irrigation, including collection of information regarding existing practice and the preparation of bulletins describing practical methods.	The technical investigations will include studies to determine the extent of losses of water under present irrigation practice and of the means which can be adopted for checking these losses, both in conveying water to the place of use and in its application to the soil; experiments to determine what methods of applying water to fields secure the best distribution of the water in the soil and the most advantageous quantities to apply at single irrigation and during the growth of a crop with different types of soil and with different crops; mechanical tests of engines and windmills used for pumping water for irrigation, for the purpose of suggesting improvements in their construction. Investigations of the use of water in irrigation include the collection of information regarding existing practice and the preparation of practical bulletins describing the best methods with a view to securing their adoption.
Arid States (in general): Collection, collation, and preparation for publication of information relating to the preparation of land for irrigation; laying out and building farm ditches; construction of farm reservoirs; use of windmills for supplying water for irrigation; and the application of water to crops usually grown in these regions, such as alfalfa, potatoes, sugar beets, grains, etc..... \$8,475.84	Arid States (in general): Collection, collation, and preparation for publication of information relating to the preparation of land for irrigation; laying out and building farm ditches; construction of farm reservoirs; use of windmills for supplying water for irrigation; and the application of water to crops usually grown in these regions, such as alfalfa, potatoes, sugar beets, grains, etc..... \$5,400.00	Arid States (in general): Collection, collation, and preparation for publication of information relating to the preparation of land for irrigation; laying out and building farm ditches; construction of farm reservoirs; use of windmills for supplying water for irrigation; and the application of water to crops usually grown in these regions, such as alfalfa, potatoes, sugar beets, grains, etc.; mechanical tests of engines and windmills used for pumping water for irrigation for the purpose of suggesting improvements in their construction..... \$5,000.00
Arizona: Investigation and studies of irrigation practice and methods of preventing losses..... 1,548.95	Arizona: Studies of irrigation practice and methods of improvement..... 2,800.00	Arizona: Studies of irrigation practice and methods of improvement..... 3,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation investigations, 1910, \$75,000—Con.</i>	<i>Irrigation investigations, 1911, \$70,380—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>On the use of water in irrigation and technical investigations—Cont'd.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>
California:	California:	California:
Studies of canal linings; evaporation losses and their prevention; percolation losses and adaptation of methods to soils, together with methods and cost of preparing land for irrigation and applying water to different crops in the Imperial, Sacramento, and San Joaquin valleys and other sections; maintenance of instrument rating station and repair shop.....	Studies of irrigation conditions in various parts of the State; demonstration in the adaptation of methods to crops and soils; experiments to determine the extent of evaporation losses and the effectiveness of methods of checking them; experiments with canal linings; maintenance of Pacific coast headquarters....	Studies of irrigation practice throughout the State; experiments to determine the extent of evaporation losses and the effectiveness of methods of checking them; experiments with canal linings; studies of pumping water for irrigation; demonstration of standard methods of applying water to land.....
\$6,571.51	\$7,150.00	\$7,000.00
Colorado:	Colorado:	Colorado:
Comparison of results of irrigation of orchards under practice common to this section with Pacific coast methods to determine whether equally good results could be obtained with less water than was commonly used; experiments in the application of water to sugar beets by different methods, and comparison with the general practice in this section, together with experiments with different degrees of cultivation after irrigation to determine the effect upon the quantity of water needed by the crops.....	Comparison of results of irrigation of orchards under practice common to this section with Pacific coast methods to determine whether equally good results may be obtained with less water than is now commonly used; experiments in the application of water to sugar beets by different methods and comparison with the general practice in this section, together with different degrees of cultivation after irrigation, to determine the effect upon the quantity of water needed by the crops..... (See also Irrigation Extension.)	Experiment in orchard irrigation to work out improvements in practice and determine the quantities of water required to secure the best results; experiments in the irrigation of sugar beets to determine the best methods of applying water and the proper quantities to apply..
1,962.58	1,100.00	1,600.00
Humid States (in general):	Humid States (in general):	Humid States (in general):
Studies of irrigation practice throughout the humid sections of the eastern United States and experiments testing the utility of more economical methods.....	Studies of irrigation practice throughout the humid sections of the United States, and experiments testing the value of different methods of applying water to truck and other crops.....	Studies of irrigation possibilities and practice throughout the humid sections of the United States and experiments along the same line, carried on in co-operation with local interests..
2,728.23	3,000.00	3,500.00
Idaho:	Idaho:	Idaho:
Studies of methods of bringing new land into cultivation, and the quantity of water required by such land; determination of the effect of using different quantities of water applied by different methods; relation of the quantities of water and time of application to yield and quantity of crop.....	Studies of methods of bringing new land under cultivation and quantities of water required; determination of the effect of using different quantities of water applied by different methods; determination of best methods of preparing land for irrigation, and applying water to crops; experiments to determine extent of evaporation losses and effectiveness of methods of preventing them.....	Experiments to determine the extent of losses of water by evaporation from the soil and the effectiveness of methods of checking them; measurements of quantities of water used; experiments to determine and demonstrate the best methods of preparing new land for irrigation and applying water.....
2,258.54	7,500.00	4,000.00
Iowa:	Iowa:	Iowa:
Comparison of yields from similar plats irrigated and unirrigated; irrigation of "water methods" with sewage water, and irrigation of meadows with stream water....	Experiments to determine the value of irrigation in the humid region; in sewage irrigation; with cement-tile subirrigation..	Experiments to determine the value of irrigation in the humid region; experiments in sewage irrigation and with cement tile for subirrigation. (Allotment included under Humid States.)
400.00	400.00	
Kansas:	Kansas:	Kansas:
Study of methods of applying water in the Arkansas, Cimarron, and Republican valleys for the purpose of preventing losses and bringing about the most economical use, and in pumping water for experiments in winter irrigation.....	Studies of methods of applying water to crops and of pumping water for irrigation; experiments in winter irrigation to determine the practicability of applying water only during the winter and spring when the water supply is ample.....	Studies of methods of applying water to crops; experiments in winter irrigation; studies of pumping water for irrigation....
1,486.96	700.00	1,200.00
Louisiana, Texas, and Arkansas:	Louisiana, Texas, and Arkansas:	Louisiana, Texas, and Arkansas
Study of rice irrigation and the preparation of a report describing irrigation practice in rice growing.....	Measurement of quantities of water used in irrigating rice; studies of irrigation practice in rice growing and pumping water for irrigation.....	(rice irrigation): Measurement of quantities of water used for the irrigation of rice; studies of irrigation practice in rice growing and in pumping water for irrigation.....
1,315.69	2,200.00	2,000.00
Minnesota:	Minnesota:	Minnesota:
Experiments in irrigation in lake region of northern Minnesota where summer droughts prevail.....	Experiments in pumping water from swamped areas and applying it to uplands for the improvement of both.....	Experiments in pumping water from swamped areas and applying it to uplands for the improvement of both. (Allotment included under humid States.)
119.80	400.00	
Montana:	Montana:	Montana:
Experiments in orchard irrigation in the Bitter Root Valley in the vicinity of Bozeman to determine the effects of different methods of applying water in conserving moisture; to determine losses of water through evaporation, and efficiency of methods of preventing these losses.....	Experiments to determine the losses of water from irrigated lands by evaporation and the efficiency of methods of preventing these losses.....	Experiments to determine the losses of water by evaporation from the soil and the effectiveness of methods of checking them; studies of irrigation practice.....
1,153.90	200.00	1,250.00
Nebraska:		Nebraska:
Study and report of canal organization and management and methods of applying water in the North Platte Valley to determine their influence upon the economical use of water, and preparation of a general report on irrigation in the State.....		Studies of irrigation practice and of the possibilities of irrigating small areas in connection with the farming of larger areas without irrigation.....
723.79		1,250.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation investigations, 1910, \$75,000—Con.</i>	<i>Irrigation investigations, 1911, \$70,580—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>On the use of water in irrigation and technical investigations—Cont'd.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>
Nevada:	Nevada:	Nevada:
Studies of the amount of water required for best results in growing grain, alfalfa, garden truck, and fruit; best methods of irrigation of orchards and alfalfa, and adaptation of methods to soils and crops.....	Experiments to determine the losses of water from irrigated lands and methods of checking these losses, and studies of irrigation practice.....	Experiments to determine the extent of losses of water by evaporation from the soil and the effectiveness of methods of checking them; experiments to determine the proper quantities of water to apply.....
\$1,000.00	\$1,000.00	\$1,000.00
New Mexico:	New Mexico:	New Mexico:
Determination of the evaporation from soils and percolation of water applied in irrigation, together with a study of general irrigation practice throughout the Territory....	Experiments to determine the losses of water from irrigated lands by evaporation, and methods of preventing these losses....	Experiments to determine the extent of losses of water by evaporation from the soil and the effectiveness of methods of checking them; studies of irrigation practice; studies of pumping water for irrigation.....
1,576.27	1,500.00	1,000.00
North Carolina:		
Determination of the best methods of applying water to truck crops in the eastern part of the State.....		
601.75		
North Dakota:	North Dakota:	North Dakota:
Determination of the evaporation from soils under different methods of application of water and cultivation.....	Experiments to determine the losses from irrigated lands by evaporation, and methods of preventing these losses.....	Experiments to determine the extent of losses of water by evaporation from the soil, and the effectiveness of methods of checking these losses; studies of irrigation practice.....
30.85	200.00	1,250.00
Oregon:	Oregon:	Oregon:
Investigations and experiments to determine the practicability of irrigation during the dry months throughout the Willamette Valley, where the annual rainfall is very heavy, but summer droughts are regular and prolonged; unirrigated crops of alfalfa, corn, potatoes, onions, and small vegetables were compared with like crops irrigated with water pumped for the purpose; experiments with alfalfa and clover were made to determine the possibility of restoring worn-out wheat lands by drainage during the dry season, and further experiments with irrigated and unirrigated orchards were conducted.....	Investigations and experiments to determine the practicability of irrigation during the dry summer months in the Willamette Valley, and investigations of irrigation practice in eastern Oregon.....	Investigations and experiments to determine the practicability of irrigation in the Willamette Valley during the dry summer months; investigations of irrigation practice in eastern Oregon..
4,128.50	3,500.00	4,000.00
Texas:	Texas:	South Dakota:
Studies of pumping, conveyance, and measurement of water to consumers, preparation of land for irrigation, and application of waters to crops in a section just brought under irrigation and populated by settlers from humid regions to whom advice was supplied.....	Studies of irrigation practice and the collection of information regarding agricultural conditions in the irrigated sections.....	Studies of irrigation practice.....
2,836.92	3,000.00	1,250.00
Utah:	Utah:	Texas:
Study of organization to provide for equitable division of water among canal companies taking water from the same stream; determination of the quantities of water used in general practice; experiments to determine what quantities of water give the best results, and best manner of applying water and providing new settlers with needed advice.....	Studies of irrigation practice throughout the State, and experiments to determine the quantities of water giving the best results.....	Studies of irrigation practice and furnishing advice to settlers and canal builders as to methods of preparing land for irrigation and applying water to crops.....
1,739.75	1,600.00	3,500.00
Washington:	Washington:	Utah:
Experiments in orchard irrigation and cooperation with local parties with a view to the improvement of methods, and use of smaller quantities of water, together with determinations of losses by evaporation.....	Studies of irrigation practice throughout the State, and experiments to determine the losses of water from irrigated lands by evaporation, and methods of preventing them.....	Experiments to determine the water requirements of crops; studies of irrigation practice.....
3,992.86	3,550.00	2,500.00
Wyoming:	Wyoming:	Washington:
Investigation of and experiments with windmills and internal-combustion engines to provide practical information in relation to wind records; the installation and operation of windmills; storage and transportation of waters by use of reservoirs, tanks, and pipes, and the use of alcohol, kerosene, and gasoline as fuel in pumping engines used in connection with irrigation.....	Soil-moisture determinations..... (See also irrigation extension.)	Experiments to determine the extent of losses of water by evaporation from the soil and the effectiveness of methods of checking these losses; studies of irrigation practice throughout the State.....
3,349.08	250.00	4,000.00
On irrigation extension:	On irrigation extension:	Wyoming:
Stations have been established and equipped in the semiarid region to determine the practicability of irrigation in sections where it has not been practiced generally, where river water is not available, the work including studies of the possibilities and cost of securing water supply by pumping with windmills and different kinds of pumps and by storing storm waters; and studies of the methods of applying water in order to make the largest use of the small supply available.	Experiments to determine the practicability of irrigation in sections where it has not been practiced generally, chiefly on the semiarid plains where river water is not available, the work including studies of the possibilities and cost of securing water supplies by pumping with different kinds of water power and different types of pumps and by storing storm waters; studies of the methods of applying water in order to secure the largest use of the small supply available. These studies will be carried on principally at stations established for that purpose.	(See irrigation extension.)
Cheyenne, Wyo.....	Cheyenne, Wyo.....	
\$4,329.89	\$3,250.00	
Newcastle, Wyo.....	Newcastle, Wyo.....	
3,138.47	2,550.00	
Eads, Colo.....	Eads, Colo.....	
3,149.03	2,250.00	
10,617.39		
		On irrigation extension:
		Experiments to determine the practicability of irrigation in sections where it has not been practiced generally, chiefly on the semiarid plains where water from the streams is not available. This work includes studies of the possibilities and cost of securing water supplies by pumping with different kinds of power and types of pumps and by storing storm waters; and methods of applying water in order to secure the largest use of the small supply available. These investigations will be carried on principally at the following stations:
		Cheyenne, Wyo.....
		\$3,500.00
		Newcastle, Wyo.....
		2,800.00
		Eads, Colo.....
		2,500.00
		8,800.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Irrigation investigations, 1910, \$75,000—Con.</i>	<i>Irrigation investigations, 1911, \$70,580—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
<i>On the use of water in irrigation and technical investigations—Con.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>	<i>On the use of water in irrigation and technical investigations—Continued.</i>
Aid and advice to settlers: Study of the conditions under which irrigation must be practiced in regions opening to settlement and practical aid and advice to settlers through demonstration, special bulletins, personal conferences, public addresses, and correspondence. (Cost included in arid States.)	Aid and advice to settlers: Very large areas have been brought under canal during the past few years, and these are being settled by farmers who are unfamiliar with irrigation. Aid is being extended to these settlers by personal advice supplemented very largely by the publication of bulletins on practical methods of bringing new land under irrigation and of applying water to crops; information regarding the opportunities for settlement and conditions to be met is also being supplied by means of bulletins. (Cost included in arid States.)	Aid and advice to settlers: A large part of the work of the regular force will consist in furnishing advice to settlers through personal interviews, illustrated lectures, and the preparation of practical bulletins on irrigation practice. The cost of this work is included in the estimates for the separate projects.
Maintenance of headquarters for irrigation extension work and central supply and rating station, Cheyenne, Wyo. \$2,538.10	Maintenance of a central supply station and headquarters for irrigation extension work at Cheyenne, Wyo. \$2,750.00	Maintenance of a central supply station and headquarters for irrigation extension work at Cheyenne, Wyo. \$2,700.00
	Maintenance of instrument-repair shop and meter-rating station, Berkeley, Cal. 1,600.00	Maintenance of meter-rating station and instrument-repair shop, Berkeley, Cal. 1,800.00
	Miscellaneous supplies, apparatus, furniture, etc. 4,000.00	Miscellaneous supplies, instruments, furniture, etc. 2,400.00
	General planning and supervision of irrigation investigations throughout the United States; preparation of reports; drafting and other work on illustrations; correspondence with field agents and the public; purchase of field instruments, accessories, etc. 13,150.00	General planning and supervision of irrigation investigations throughout the United States; preparation of reports, drafting, and other work on illustrations; correspondence with field agents and the public; purchase of field instruments, accessories, etc. 6,380.00
	Total amount of above appropriation 75,000.00	Total amount of above appropriation 70,380.00
	<i>Drainage investigations, 1910, \$81,160.</i>	<i>Drainage investigations, 1911, \$78,860.</i>
	Salaries: In Washington. \$16,000.00 Out of Washington. 23,000.00	Salaries: In Washington. \$16,000.00 Out of Washington. 24,000.00
	Stationery. 200.00	Stationery. 500.00
	Miscellaneous supplies, services, equipment, books, machinery, etc. 9,420.00	Miscellaneous supplies, services, equipment, books, machinery, etc. 8,000.00
	Furniture. 1,000.00	Furniture. 1,000.00
	Freight. 100.00	Freight. 150.00
	Express. 150.00	Express. 150.00
	Telegraph. 100.00	Telegraph. 100.00
	Telephone. 10.00	Telephone. 10.00
	Rent. 180.00	Rent. 180.00
	Apparatus, instruments, and laboratory material. 1,000.00	Apparatus, instruments, and laboratory material. 1,000.00
	Travel and station and field expenses. 30,000.00	Travel and station and field expenses. 27,770.00
	Total amount of above appropriation 81,160.00	Total amount estimated (an apparent decrease from 1910 of \$2,300) 78,860.00
	NOTE.—The above proposed expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, will be necessary to carry out the provisions of an act making appropriations for the Department of Agriculture for the fiscal year 1910, enabling the Secretary of Agriculture to investigate and report upon the drainage of swamp and other wet lands and to prepare plans for the removal of surplus waters by drainage and for the preparation and illustration of reports and bulletins on drainage, etc., the proposed expenditures by States for this work being as follows:	NOTE.—Apparent decrease \$2,300, but adding the salaries of places transferred to the statutory roll, and the amount transferred to contingent expenses, Office of the Secretary, the total estimate is the same. NOTE.—The above estimates, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary to enable the Secretary of Agriculture to complete and report upon investigations now in progress and for the continuation and extension of the work to different localities. The proposed expenditures by States for this work is as follows:
	Arkansas. 3,400.00	Arkansas. 6,000.00
	Atlantic Coast States (in general) 2,000.00	Atlantic Coast States (in general) 3,000.00
	California. 2,000.00	California. 2,000.00
	Colorado. 4,000.00	Colorado. 4,000.00
	Florida. 1,000.00	Florida. 1,500.00
	Illinois. 1,200.00	Georgia. 2,000.00
	Kansas. 5,000.00	Iowa. 2,000.00
	Louisiana. 2,000.00	Kansas. 3,000.00
	Mississippi. 1,300.00	Mississippi. 4,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Drainage investigations, 1910, \$81,160—Con.</i>	<i>Drainage investigations, 1911, \$78,860—Con.</i>
PROJECTS—continued.	Nebraska..... \$4,000.00	North Carolina..... \$4,000.00
	North Carolina..... 4,200.00	Oklahoma..... 2,000.00
	Oklahoma..... 3,000.00	South Carolina..... 3,000.00
	Texas..... 2,000.00	Texas..... 4,000.00
	Utah..... 4,000.00	Utah..... 2,500.00
	Virginia..... 200.00	Virginia..... 2,000.00
	Wyoming..... 1,000.00	Washington..... 500.00
	Advisory and consulting drainage field work and special scientific investigations..... 10,500.00	Wyoming..... 3,000.00
		Advisory and consulting drainage field work and special scientific investigations..... 10,000.00
	50,800.00	58,500.00
	PROJECTS.	PROJECTS.
	The expenditures in connection with the investigations will be distributed largely among definite projects, the object and estimated cost of each being as stated below:	The proposed expenditures in connection with the investigations will be distributed largely among definite projects, the object and estimated cost of each being as stated below:
Arkansas:	Arkansas:	Arkansas:
Ascertaining the value of wet lands and outlining general plans for drainage improvements along Plum Bayou; continuation of drainage surveys of low lands bordering the Mississippi River in the White and St. Francis basins; determination of the feasibility and cost of construction of same; investigations of the practicability of draining the prairie lands south and west of Lonoke by means of roadside ditches, and improving the natural channels, especially in the area where the cultivation of rice is rapidly extending; tests of the effectiveness of underdrains in preparing the land for crops other than rice; plans for the protection of the bottom lands along Village and Running Water creeks from overflow; and general improvement of malarial and unsanitary conditions..... \$14,823.28	For extending the surveys for the drainage of the lands in the St. Francis basin as a whole, and for determining the drainage units into which it should be divided; to determine the size of the ditches which should be employed; to assist local engineers and county drainage authorities in planning and directing the work; preliminary drainage surveys in parts of the State where questions arise among landowners regarding the feasibility of contemplated drainage work; examination of natural drainage streams, and recommendations as to how they may be most effectually improved, and the cost of the work required, and the preliminary examination of 20,000 acres of overflowed land in Independence County..... 3,400.00	For examinations and plans for reclaiming the lands in the St. Francis basin lying south of Crittenden County, and the devising and preparation of plans for draining other parts of the State in cooperation with property owners and local drainage engineers..... 6,000.00
Atlantic Coast States (in general):	Atlantic Coast States (in general):	Atlantic Coast States (in general):
Investigations to determine the value of tidal marshes for agricultural purposes; best methods of reclaiming, including best system of diking and methods of building, getting rid of interior seepage water and bringing soil into a condition fit for agriculture. (See also Delaware and Maryland)..... 652.38	Examination of coast dikes, sluices, and gates required for the protection of tidal lands which may be made suitable for agriculture; determination of the cause of their failure and cost of stable structures; experiments with automatic sluice gates..... 2,000.00	Preparation of plans for and advisory cooperation in experiments in the reclamation of tidal land..... 3,000.00
California:	California:	California:
Development of plans for the organized drainage of lands in the Fresno and Tullock districts where both pumping and gravity drainage is required..... 1,045.91	Development of plans for the organized drainage of lands in the Fresno and Tullock districts where both pumping and gravity drainage is required..... 2,000.00	For preparing a plan for draining the Fresno district through a gravity outlet into the San Joaquin River..... 2,000.00
Colorado:	Colorado:	Colorado:
Investigations and surveys to determine the best methods of draining lands in the San Luis Valley where seepage and alkali are making rapid inroads upon the cultivated area as well as preventing the extension of settlement of adjoining unimproved land; study of the feasibility of reclaiming the injured lands, now estimated as amounting to 40,000 acres in this valley, and to inaugurate similar studies in the Gunnison and Grand valleys, including a topographic drainage survey of the California Mesa.... 5,064.45	Continuation of the investigations to ascertain practical methods for reclaiming seeped lands in the valleys of the Grand and Gunnison rivers and the San Luis Valley which are seriously injured by overirrigation and alkali and preparation of drainage plans for landowners based upon the results of experiments and successful practice upon lands of similar character..... 4,000.00	For planning and directing experimental drainage of seeped and alkaline lands in the valleys of the Grand and the Uncompahgre rivers on the western slope; in the Arkansas Valley on the eastern slope; and in the San Luis Valley in the south... 4,000.00
Delaware and Maryland:	Delaware, Maryland, and New Jersey:	
Field surveys to determine methods best adapted for the drainage and reclamation of the swamp and overflowed river bottom lands of the flat coastal plain region and its adaptation for agricultural uses after drainage..... 1,362.96	Included under Atlantic Coast States.	
Florida:	Florida:	Florida:
Completion of investigations to determine the feasibility of draining the Everglades and the practicability of rendering portions of this swamp area available for the raising of citrus and other subtropical fruits; preparation of a proposed plan of drainage and suggestions as to best methods of undertaking the work..... 779.03	Experiments in cooperation with landowners in draining small areas of the Everglade border lands by means of dikes, ditches, and diverting drains..... 1,000.00	For drainage experiments with ditches and levees or dikes required in reclaiming the muck lands of the Everglades..... 1,500.00
Georgia:		Georgia:
Survey and preparation of plans for drainage of the Berry School Farm in Floyd County and for the protection of the lands in Jackson County by improving the Mulberry River by means of cut-offs and channel clearing..... 1,131.21		For examination of valleys overflowed by small streams and adjacent eroded hillsides for the purpose of devising methods of restoring such lands to production..... 2,000.00

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Drainage investigations, 1910, \$81,160—Con.</i>	<i>Drainage investigations, 1911, \$78,860—Con.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage—Continued.		
Illinois:	Illinois:	
Studies and surveys to determine the best plans for preventing injury by overflow along the Little Wabash River and other small streams in the southern portion of the State, and freeing them of surplus rainfall in order that they may be used for agriculture; collection of information regarding the size of ditches in operation ten years or more, the areas drained by them, efficiency as tested by experience, measurements of flow; observations of general conditions, rainfall and run-off data for use in determining the proper size of drainage ditches and drain tile mains for lands of the type prevailing in the corn belt.....	Studies of the effect upon the lower valley lands of the extension district and farm drainage systems which have been in operation for a number of years; continuing the collection of data of run-off from drained areas of various dimensions and classification and compilation of such information; drainage survey to determine the best method of improving the Kaskaskia River lands.....	
\$3,311.41	\$1,200.00	
Indiana:		Iowa:
Report and plans for a freer and more complete drainage of lands in the valley of the Yellow River.....		Cooperation with a commission appointed by the governor to devise a comprehensive plan for the conservation of soil fertility and protection of the valley lands of the larger rivers of the State.....
6.00		\$2,000.00
Kansas:	Kansas:	Kansas:
Included under "General supervision."	Determination of the value of tile drainage for the lands of southeastern Kansas, investigations to be carried on in cooperation with farmers; drainage surveys to determine the best plan for preventing the overflow of about 80,000 acres in the valley of the Marais des Cygnes lying in Osage, Franklin, Miami, and Linn counties and improving the Little Caney River to prevent overflows and provide an outlet for drainage of the adjacent lands.....	For examinations, surveys, and reports upon the drainage of overflowed land in the eastern part of the State.....
	5,000.00	3,000.00
Louisiana:	Louisiana:	
Collection of information relating to current construction of drainage ditches, conditions affecting their maintenance and repair; customary methods of carrying on the work and its cost; observations, measurements, etc., for use in computing the run-off from drainage areas....	Determination of the cost of securing better drainage by opening and cleaning natural bayous in the northern part of the State and whether benefits secured will justify the expense, special localities to be examined; continuation of run-off investigations and collection of information concerning conditions affecting maintenance of ditches and methods of doing the work and the cost of drainage work..	
1,478.47	2,000.00	
Mississippi:	Mississippi:	Mississippi:
Completion of reports of work already accomplished in this State and drainage survey preliminary to report on and plan for the improvement of the Tuscumbia River to prevent overflow of bottom lands in Alcorn and Prentiss counties.....	Examination and development of plans for the drainage of areas in Sunflower and Holmes counties and for testing the efficiency of underdrains in Warren and Holmes counties; completion of the drainage survey and plans for the improvement of the Tuscumbia River.....	For cooperation with landowners in the Yazoo Delta to ascertain best methods of draining "buck-shot" and other heavy soils....
3,223.36	1,300.00	4,000.00
Nebraska:	Nebraska:	
Field survey and allied investigations to determine the best plan for protecting from overflow and for the drainage of about 80,000 acres of bottom land along the Logan River where the valley is from three-fourths to 1½ miles wide, and the land, though very valuable for cropping, is now overflowed and nearly useless; drainage survey of Silver Creek from its source to its junction with the Platte to determine location for an improved channel, cost of needed work, and extent of areas which should be benefited by such improvements; drainage survey of Salt Creek from its junction with the Platte to a few miles above Lincoln to determine best method, cost, etc., of improving the channel to prevent the disastrous overflow of Lincoln and the rich bottom lands along the river; drainage survey of Wahoo Creek to plan the improvement of the channel to prevent the overflow of the bottom lands; preliminary examination of the Nemaha River.....	Surveys and plans for a general drainage system in Holt County and advisory assistance to drainage commissioners in carrying out the projects for which plans were made by this office in 1909; completion of drainage surveys and plans for the relief of lands along Salt and Wahoo creeks; drainage survey to determine best plan to prevent overflow of the Nemaha River in Pawnee County.....	
6,226.57	4,000.00	

204 EXPENDITURES, APPROPRIATIONS, AND ESTIMATES, DEPARTMENT OF AGRICULTURE.

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Drainage investigations, 1910, \$81,160—Cont'd.</i>	<i>Drainage investigations, 1911, \$78,860—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage—Continued.		
North Carolina:	North Carolina:	North Carolina:
Field survey and plans for the drainage of about 13,000 acres known as Angola Bay Swamp, together with preparation of plans for the construction of about 22 miles of ditches and aid in the initiation of a comprehensive and adequate system of drainage; survey of and plans for the drainage of Lake Motamuskeet and the surrounding district, determination of elevation of Lake Phelps, Hongo Lake, New Lake, and Alligator Lake to obtain information needed in the preparation of complete plans for drainage and division into natural drainage districts of this section; survey and plans for the control of Lake Phelps and the drainage of the surrounding district; survey and completion of plans for main drainage of about 15,000 acres lying south of Moyock; survey and plans for proposed drainage of Cape Fear River lowlands in vicinity of Kelly's Cove; survey and plans for a drainage system for the cultivated lands about Chadbourne; survey and completion of plans for drainage of about 15,000 acres, partly in swamp, along Pantego Creek.....	Examination and plans for the drainage of portions of Robeson and Bladen counties, and for assisting the people in carrying out the plans prepared by this office in 1909; continuation of the drainage surveys and preparation of the plans for drainage about Lake Phelps and Pantego Creek; survey and plan for improvement of Pungo River to furnish an outlet for the Pungo drainage district; survey to determine a practical plan for reclaiming and permanently protecting the overflowed lands of the Roanoke River Valley between Halifax and the coast; survey and plan of drainage for Lyon Swamp to reclaim about 10,000 acres of swamp and overflowed lands in Bladen County; preliminary examinations of Belvidere Swamp in Perquimans County and the wet lands in Richland Township, Beaufort County and the lands requiring drainage in Pasquotank County with Little River as an outlet.....	For examination of wet lands preliminary to preparing recommendations for the organization of drainage districts under the state law.....
\$6,699.21	\$4,200.00	\$4,000.00
North Dakota:	North Dakota:	Oklahoma:
Observations and records of 28 soil wells to determine the effectiveness of tile drainage in a section where the ground freezes to a depth of about 6 feet during the winter.....	Included under "Special scientific investigations."	For investigation of overflowed valley lands
25.00		2,000.00
Oklahoma:	Oklahoma:	South Carolina:
Drainage survey and plans for the proposed improvement of the Dry Fork and Deep Fork rivers by means of straightening, channel cleaning, etc., to protect agricultural bottom lands from overflow.....	Drainage survey and plans for the proposed improvement of the Dry Fork and Deep Fork rivers by means of straightening, channel cleaning, etc., to protect agricultural bottom lands from overflow.	For examinations, surveys, and advice in connection with proposed reclamation of abandoned plantations.....
1,268.11		3,000.00
South Carolina:	South Carolina:	Texas:
Drainage survey and preparation of plans for the improvement of natural channels to provide adequate drainage outlets in Berkeley County; for the location of natural drainage channels for an area 5 by 6 miles bordering the upper part of Sampit Creek and its tributaries; for the drainage of the lowlands bordering thereon; field survey of section along the north side of Congaree River, Richland County, to determine best methods to be adopted for the protection of fertile bottom lands which overflow at times of freshets in the river, and fitting such lands for the most profitable cultivation; preparation of plans to utilize as far as possible the remains of levees constructed many years ago; collection of all available data as to frequency, duration, and height of freshets in the Congaree River, and nature of watershed from which the river is supplied.....	Included under "Reserve."	For investigations in the Rio Grande and Pecos valleys with reference to needed drainage of irrigate land which is now wet and overcharged with injurious salts.....
1,174.30		4,000.00
South Dakota:	Texas:	Utah:
Field survey in Turner and Clay counties and preparation of plans for protecting from overflow and draining the bottom lands along the Vermillion River where the valley varies from one-half to 3 miles in width; report on construction of Clay Creek ditch following drainage plan prepared by this office.....	Investigations in the Brownsville district to ascertain methods that should be used in draining irrigated lands used for growing sugar cane; preparation of drainage plans for various ranch owners in southern and southwestern Texas; computations, plans, and reports upon the Chambers Creek drainage district in vicinity of Waxahachie.	For drainage surveys and furnishing plans for farmers desiring to drain seeped lands under a cooperative fund provided by the State and this department.....
1,998.35	2,000.00	2,500.00
Texas:	Utah:	
Determination of the effect that different depths and locations of ditches have in relieving soil in which large crops of rice were grown the first year under irrigation, but which has since accumulated salt to such an extent that that it has become unproductive; devising methods of drainage by means of which this land may be relieved; aid to ranch owners in planning drainage systems for ranches in Brownsville section.....	Cooperative work with farmers in draining saturated and alkaline irrigated land and experiments with different materials for drains; topographic drainage survey of portion of Millard County and plans for its reclamation and future protection from seepage and alkali; continuation of the St. George and Huntington drainage experiments; drainage district surveys and plans in Utah, Sevier, and Davis counties; experiments in laboratory and field to determine the effect of alkali on cement tile.....	
889.05	4,000.00	
Utah:		
Continuation of experiments and investigations to determine the possibility and profitability of draining and reclaiming areas of land once under profitable cultivation by irrigation and subsequently ruined by the accumulation of water and alkali; experiments to determine the most practical materials available for use in constructing underdrains suitable for installing in the various soils found in different counties throughout the State; report completed on the drainage of irrigated lands, covering Utah work to date.....		
4,702.85		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Experiment Stations—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Irrigation and drainage investigations, 1909, \$150,000—Continued.</i>	<i>Drainage investigations, 1910, \$81,160—Cont'd.</i>	<i>Drainage investigations, 1911, \$78,860—Cont'd.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
On drainage—Continued.		
	Virginia:	Virginia:
	Investigation of the lands of the Dismal Swamp with reference to their drainage and examination of a part of the coastal lands of the State. Plans for drainage of Cumberland Farm near Grassfield, Norfolk, Va.	For assistance to farmers in devising and carrying out plans for draining lands now under cultivation.
	\$200.00	\$2,000.00
	Wyoming:	Washington:
Completion of report on experimental drainage system at the Wyoming Agricultural Experimental Station Farm at Laramie.	Cooperation with farmers of irrigated land in the Big Horn Basin in planning drainage ditches for seeped lands.	Supervisory assistance in perfecting the drainage of the lands in the Moxee district in Yakima County.
\$10.00	1,000.00	500.00
Special investigations and advisory field work:	Advisory and consulting work and special scientific investigations: Examinations upon request of engineers and drainage boards, of proposed drainage plans and advisory reports upon the same; consultation with state committees upon drainage policies and laws and feasibility of large drainage improvements, plans for which are in the hands of special local engineers; investigations relating to run-off to be provided for in different climates and different kinds of lands; effect of underdrains of different kinds and in different soils upon the water content; of the use of cement drain tile; lectures, addresses, and written articles for the dissemination of popular information upon the subject.	Wyoming:
Scientific investigations of technical problems pertaining to land drainage concerning which there is lack of existing information including drainage of hillside lands and muck lands which border on peat formations; movement and behavior of water in irrigated land; method of testing cement drain tiles; loss of erosion and sedimentation of ditches; factors which determine the gradual variation in different classes of land with respect to the readiness with which they yield to drainage efforts; dissemination of the results of investigations by means of lectures, addresses, and oral or written reports to those directly interested in the various projects.	10,500.00	For assistance to farmers in the Big Horn and Grey Bull valleys in reclaiming seeped and alkaline land.
6,667.79		3,000.00
	Reserve:	Advisory and consulting work:
	Investigations for which plans have not yet been entirely completed; provision for costs in excess of allotments and for such new projects as may later seem desirable.	For examinations and reports upon requests of engineers and drainage boards upon the merits of proposed plans of drainage; consultation with state and county commissioners upon drainage policies, laws, and current practice.
	10,000.00	5,000.00
Miscellaneous, supplies, apparatus, furniture, etc.	8,360.00	Special scientific investigations:
13,213.08		For conducting investigations relating to run-off from different classes of lands; relative efficiency of different kinds of drains; methods of cleaning drain tile laid in irrigated lands; tests of cement tiles and erosion decementation of ditches.
General planning and supervision of irrigation and drainage investigations throughout the United States; preparation of reports, drafting and other work on illustrations, correspondence with field agents and the public, purchase of field instruments and accessories, etc.	12,000.00	5,000.00
12,673.54		Reserve:
	Total amount of above appropriation.	Investigations for which plans have not been definitely formulated, provision for costs in excess of allotments, and for new projects which later developments may demand.
	\$81,160.00	7,500.00
	Total appropriations for the Office of Experiment Stations (an increase over 1909 of \$34,600)	Miscellaneous, field supplies, instruments, etc.
	349,220.00	4,860.00
Total appropriations for the Office of Experiment Stations.		General planning and supervision of drainage investigations throughout the United States; preparation and revision of reports, drafting and other work on maps and illustrations, office supplies, furniture, etc.
314,620.00		8,000.00
		Total amount estimated.
Total expenditures to August 31, 1909.		78,860.00
310,917.43		
Outstanding liabilities on August 31, 1909 (estimated).		Total amount estimated for the Office of Experiment Stations (an apparent decrease from 1910 of \$1,400)
3,130.35		347,820.00
Balance to be turned back in Treasury (estimated).		
572.22		
		NOTE.—Apparent decrease \$1,400 but adding salaries of places transferred to Secretary's roll, and amount transferred to contingent expenses, Office of the Secretary, the total estimate is the same.

OFFICE OF PUBLIC ROADS.

NOTE.—The above estimates of expenditures, classified in accordance with the suggestion of the congressional committee on expenditures for this department, have been submitted as necessary for prosecuting the important work of the Office of Public Roads. This work will fall naturally under the following projects:

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Public road inquiries, 1909, \$75,000—Continued.</i>	<i>General Expenses, Office of Public Roads, 1910, \$100,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1911, \$92,980—Continued.</i>
PROJECTS.	PROJECTS.	PROJECTS.
(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge):	(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge):	(1) Object-lesson roads (Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$13,255.46	Salaries..... \$17,000.00	Salaries..... \$17,000.00
Travel expenses..... 2,319.21	Travel expenses..... 4,500.00	Travel expenses..... 4,500.00
Miscellaneous expenses..... 1,342.12	Miscellaneous expenses..... 1,000.00	Miscellaneous expenses..... 500.00
\$16,916.79	\$22,500.00	\$22,000.00
The object-lesson method is designed to introduce standard forms of construction and maintenance throughout the country. The procedure is as follows: Upon request of local authorities, engineers are assigned to make surveys, prepare plans and specifications, and supervise the construction of a short section of road of the materials selected after physical tests made in the laboratory of this office. During the construction the local men are given thorough instruction, so that upon the departure of the government engineers the road work will go on according to correct methods.		
(2) Instruction in highway engineering (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(2) Instruction in highway engineering (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(2) Instruction in highway engineering (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$2,986.99	Salaries..... \$5,000.00	Salaries..... \$4,500.00
Travel expenses..... 1,728.75	Travel expenses..... 3,000.00	Travel expenses..... 2,500.00
4,715.74	8,000.00	7,000.00
After a competitive examination held by the Civil Service Commission, a small number of graduates of engineering schools are appointed to the position of civil engineer student, at a salary of \$60 per month and field expenses. They continue in this position for a period of one year, during which they are given opportunity to acquire practical knowledge of every branch of road work, both in the field and the laboratories. At the end of one year they are retained and promoted to the position of junior highway engineer, or given certificates showing that they have completed a graduate course in highway engineering with this Office. The instruction is not gratuitous, as the engineer students render valuable services from the outset. The plan ultimately results in the formation of a trained corps of highway engineers for the government service, which is also a constant source of supply from which the various States and counties may secure competent men to direct their road work. The project is gradually being amplified by cooperation with engineering schools, looking to the introduction of practical courses of instruction in highway engineering.		
(3) Testing road materials (Dr. A. S. Cushman, assistant director, in charge):	(3) Testing road materials (Dr. A. S. Cushman, assistant director, in charge):	(3) Testing road materials (Dr. A. S. Cushman, assistant director, in charge):
Salaries..... \$5,049.37	Salaries..... \$5,000.00	Salaries..... \$4,500.00
Expenses..... 559.88	Expenses..... 1,000.00	Expenses..... 580.00
5,609.25	6,000.00	5,080.00
This project involves the microscopic and chemical analyses of road materials to determine the relative hardness, toughness, cementing value, and resistance to wear of each sample. These tests are designed to approximate field conditions and make possible an intelligent selection of materials for road building.		
(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(4) Road management and accounting (Mr. J. E. Pennybacker, jr., chief of road management, in charge):
Salaries..... \$4,706.33	Salaries..... \$7,500.00	Salaries..... \$6,500.00
Travel expenses..... 251.30	Travel expenses..... 1,500.00	Travel expenses..... 1,500.00
Miscellaneous expenses..... 337.01	Miscellaneous expenses..... 500.00	Miscellaneous expenses..... 500.00
5,294.64	9,500.00	8,500.00
This project involves an investigation of road laws and systems of road management in this and foreign countries, and the preparation of bulletins explaining the state aid and state supervision plan, the county and township systems, needed improvements in road accounting, and various economic questions connected with road building, such as the use of convict labor, traffic regulations, etc.		
(5) Lectures, addresses, and papers (Mr. L. W. Page, director, in charge):	(5) Lectures, addresses, and papers (Mr. L. W. Page, director, in charge):	(5) Lectures, addresses, and papers (Mr. L. W. Page, director, in charge):
Salaries..... \$2,285.69	Salaries..... \$3,950.00	Salaries..... \$3,100.00
Travel expenses..... 2,719.64	Travel expenses..... 2,050.00	Travel expenses..... 1,700.00
Miscellaneous expenses..... 257.22	Miscellaneous expenses..... 400.00	Miscellaneous expenses..... 200.00
5,262.55	6,400.00	5,000.00
This is not, strictly speaking, a project within itself for the reason that the office has no employees who may be termed lecturers. There is a constant and increasing demand for representatives of this office to address public meetings, and in many cases assignments are made of such officials or employees as are immediately available. Much practical information and instruction are given in this way, and undoubtedly exert a beneficial influence in directing public sentiment in the best channels.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Public road inquiries, 1909, \$75,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1910. \$100,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1911, \$92,980—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(6) Special advice and inspection (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(6) Special advice and inspection (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(6) Special advice and inspection (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$2,737.14	Salaries..... \$3,000.00	Salaries..... \$3,000.00
Travel expenses..... 1,829.65	Travel expenses.. 1,950.00	Travel expenses.. 1,950.00
Miscellaneous expenses..... 13.19	Miscellaneous expenses..... 50.00	Miscellaneous expenses..... 50.00
\$4,579.98	\$5,000.00	\$5,000.00
This project embraces the general advisory work of the office, and most of the preliminary inspection in which experienced engineers determine the character of assistance needed.		
(7) Dust prevention and dustless roads (Mr. L. W. Page, director, in charge):	(7) Dust prevention and dustless roads (Mr. L. W. Page, director, in charge):	(7) Dust prevention and dustless roads (Mr. L. W. Page, director, in charge):
Salaries..... \$2,599.25	Salaries..... \$5,000.00	Salaries..... \$4,000.00
Travel expenses..... 2,179.56	Travel expenses.. 2,750.00	Travel expenses.. 1,850.00
Miscellaneous expenses..... 194.83	Miscellaneous expenses..... 250.00	Miscellaneous expenses..... 150.00
4,973.67	8,000.00	6,000.00
In recent years the most important and difficult problem which has engaged the attention of highway engineers is the preservation of macadam roads from the destructive effects of modern motor traffic. So important is this question considered that the French Government called an International Road Congress to meet in Paris in October, 1908, to consider this and kindred subjects. Representatives from eleven nations were present, and at the suggestion of the chairman of the American commission (who was the director of this office) a Permanent International Road Bureau was formed. The congress will meet again in Brussels in 1910.		
This office is conducting experiments with various dust preventives as palliatives, and with new forms of construction for the purpose of evolving a dustless road.		
(8) Standardization of tests (Mr. L. W. Page, director, in charge):	(8) Standardization of tests (Mr. L. W. Page, director, in charge):	(8) Standardization of tests (Mr. L. W. Page, director, in charge):
No expenditure.	(No expenditure during this fiscal year.)	(No expenditure during this fiscal year.)
(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(9) Introduction of model systems of construction, maintenance, and administration (Mr. L. W. Page, director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$1,596.13	Salaries..... \$3,500.00	Salaries..... \$3,500.00
Travel expenses..... 430.23	Travel expenses.. 1,500.00	Travel expenses.. 1,500.00
2,026.36	5,000.00	5,000.00
Under this project engineers are assigned upon request of local authorities to investigate roads, materials, organization, methods of administration, construction, and maintenance, and all features in connection with the road work of a given county, and to prepare an exhaustive report giving full information on all these, and recommendations for the future construction, maintenance, and administration of the roads, the report to be accompanied by plans and estimates where practicable. The purpose is to introduce in certain selected counties in various sections of the country model systems which will serve as object lessons for other counties.		
(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge):	(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge):	(10) Investigation of road materials in the several States (Mr. L. W. Page, director, in charge):
Salaries..... \$227.97	Salaries..... \$600.00	Salaries..... \$600.00
Travel expenses..... 9.37	Travel expenses.... 300.00	Travel expenses.... 300.00
237.34	900.00	900.00
The appropriation bill for this office provides specifically for an investigation of road materials in the several States. It is manifest, however, that the appropriation for this office is inadequate to conduct such an investigation on a comprehensive scale. Fortunately a partial solution of the problem has been devised by a cooperative arrangement with the Geological Survey, whereby the geologists of the survey will cooperate with this office by making field investigations of road materials and securing specimens for transmission to this office. Laboratory tests and such special field work as may be necessary will be done under the direction of this office, and the bulletins will be issued by the Department of Agriculture.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Public road inquiries, 1909, \$75,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1910, \$100,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1911, \$92,980—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(11) Sand-clay and burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge):	(11) Sand-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge):	(11) Sand-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$4,382.78	Salaries..... \$4,000.00	Salaries..... \$3,000.00
Travel expenses..... 780.34	Travel expenses.. 1,200.00	Travel expenses.. 1,500.00
\$5,163.12	\$5,200.00	\$4,500.00
The construction of roads by mixing sand and clay in proper proportions and according to certain methods has produced satisfactory roads in many parts of the South. The method is simple, but unfortunately it has not been utilized to the extent which its success warrants. There is reason to believe that the method may be successfully adopted in many of the prairie States, and it is the purpose of the office to conduct experiments with this form of construction and to introduce it wherever it may be successfully employed.		
(During the fiscal years 1908 and 1909 sand-clay and burnt-clay roads were considered as one project. Beginning with the fiscal year 1910 they will be considered as separate projects and allotments and estimates made accordingly.)		
(12) (Included in project No. 11.)	(12) Burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge):	(12) Burnt-clay roads (Mr. Vernon M. Peirce, chief engineer, in charge):
	Salaries..... \$1,500.00	Salaries..... \$1,500.00
	Travel expenses.. 500.00	Travel expenses.. 500.00
	2,000.00	2,000.00
	Experiments have demonstrated that under favorable conditions the burnt-clay road is a success, and a more thorough investigation will be undertaken by the office for the purpose of testing the various kinds of clay, methods of burning with different kinds of fuel, etc.	
(13) Investigation of slag (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(13) Investigation of slag (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):	(13) Investigation of slag (Dr. A. S. Cushman, assistant director, and Mr. Vernon M. Peirce, chief engineer, in charge):
Salaries..... \$435.73	Salaries..... \$1,800.00	Salaries..... \$1,000.00
Travel expenses..... 246.85	Travel expenses.. 400.00	Travel expenses.. 300.00
682.58	Miscellaneous expenses..... 800.00	Miscellaneous expenses..... 300.00
It has been estimated that some twenty million tons of slag are produced in the various blast furnaces of this country annually. To a very large extent this by-product would become available for road construction if it possessed the necessary physical properties. Except in a few cases blast-furnace slag does not possess sufficient binding power for use as a road material, but investigations carried on by this office indicate great possibilities in the use of slag in combination with other materials for road building. For instance, by the addition of a certain amount of lime or limestone the binding power is greatly increased. It is also probable that slag in combination with bituminous binders may be successfully employed in the building of roads which would be practically dustless. Exhaustive field tests will be carried on with this material during the fiscal year 1910.	3,000.00	1,600.00
(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge):	(14) Cooperation with county newspapers (Mr. J. E. Pennybacker, jr., chief of road management, in charge):
(Expenditures under this project combined with those of No. 4.)	(Expenditures under this project combined with those of No. 4.)	(Expenditures under this project combined with those of No. 4.)
(15) Corrosion of iron and steel (Dr. A. S. Cushman, assistant director, in charge):	(15) Corrosion of iron and steel (Dr. A. S. Cushman, assistant director, in charge):	(15) Corrosion of iron and steel (Dr. A. S. Cushman, assistant director, in charge):
Salaries..... \$1,648.38	Salaries..... \$1,800.00	Salaries..... \$1,800.00
Travel expenses..... 221.70	Travel expenses.. 700.00	Travel expenses.. 700.00
Miscellaneous expenses..... 29.70	Miscellaneous expenses..... 500.00	Miscellaneous expenses..... 500.00
1,899.78	3,000.00	3,000.00
This investigation was begun for the purpose of determining the cause of corrosion of metal-road culverts and to discover, if possible, means of preventing or minimizing the corrosion. The investigation thus far has produced data of great scientific and practical value, which are set forth in publications issued by the office. The results of the work have already proved of great benefit to road builders, as several of the rolling mills have entirely changed their methods of manufacture as a result of these investigations, and it is now possible to obtain culverts made of metal which is 99.96 per cent pure iron. This investigation should result in much benefit to the farmers, in view of the great loss which farmers suffer through corrosion of fence wire.		
(16) Split-log drag (Mr. D. Ward King, expert, in charge):	(16) Split-log drag (Mr. D. Ward King, expert, in charge):	(16) Split-log drag (Mr. D. Ward King, expert, in charge):
Salaries..... \$109.00	Salaries..... \$1,200.00	Salaries..... \$1,200.00
Travel expenses..... 127.68	Travel expenses.. 800.00	Travel expenses.. 800.00
236.68	2,000.00	2,000.00
The usefulness of the split-log drag in the maintenance of earth roads is universally acknowledged. In view of the fact that there are approximately 2,000,000 miles of earth roads in the United States, the widest possible introduction of this simple, inexpensive, and exceedingly effective implement should be brought about.		

Classified and detailed estimates of every subject of expenditure intended for the Department of Agriculture for the fiscal year ending June 30, 1911, and detailed reports of all expenditures under any appropriation for such service during the fiscal year ended June 30, 1909 (34 Statutes, p. 1282); to which, for purposes of ready comparison, has been added, in parallel columns, a detailed statement of the appropriations being expended for the department during the current fiscal year ending June 30, 1910—Continued.

Office of Public Roads—Continued.

Detailed expenditures for the fiscal year ended June 30, 1909.	Appropriations for the current fiscal year ending June 30, 1910.	Estimated expenditures for the fiscal year ending June 30, 1911.
<i>Public road inquiries, 1909, \$75,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1910, \$100,000—Continued.</i>	<i>General expenses, Office of Public Roads, 1911, \$92,980—Continued.</i>
PROJECTS—continued.	PROJECTS—continued.	PROJECTS—continued.
(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge): Salaries..... \$700.00 Under this project road materials are classified according to their mineral composition and a study is made of the relationship existing between the mineral composition and the physical properties of road materials.	(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge): Salaries..... \$700.00	(17) Classification of road materials (Dr. E. C. E. Lord, petrographer, in charge): Salaries..... \$700.00
(18) Bibliography on roads. (No expenditure during this fiscal year.)	(18) Bibliography on roads. (No expenditure during this fiscal year.)	(18) Bibliography on roads. (No expenditure during this fiscal year.)
(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, messengers, laborers, etc., in Washington..... 9,886.87	(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, messengers, laborers, etc., in Washington..... 8,800.00	(19) Administration, including rent of office, maintenance of machine shop, contingent expenses, freight, telegraph, telephone, etc., in Washington..... 10,700.00
(20) Traction tests (Prof. E. B. McCormick, consulting engineer, in charge): Salaries..... \$384.33 Travel expenses..... 490.01 Miscellaneous expenses..... 1,028.70 1,903.04 Under this project it is the purpose of the office to conduct tests to determine the comparative effect of various widths of tire, various grades, and road surfaces on tractive resistance. In September, 1908, a number of such tests were conducted at Memphis, Tenn., in cooperation with the Tri-State Fair Association, then holding a fair at that place. These tests will be continued during the coming fiscal years.	(20) Traction tests (Prof. E. B. McCormick, consulting engineer in charge): Salaries..... \$450.00 Travel expenses..... 300.00 Miscellaneous expenses..... 250.00 1,000.00	(20) Traction tests (Prof. E. B. McCormick, consulting engineer, in charge): Salaries..... \$500.00 Travel expenses..... 250.00 Miscellaneous expenses..... 250.00 1,000.00
(21) Inspection of rural-delivery roads (Mr. Vernon M. Peirce, chief engineer, in charge): Salaries..... \$64.17 Travel expenses..... 130.39 194.56 The Fourth Assistant Postmaster-General notifies this office, from time to time, of rural-delivery roads in bad state of repair. The office thereupon tenders to the local authorities having jurisdiction the services of an engineer to inspect the road and give advice and instruction for its repair and maintenance. This project works to the advantage of all parties concerned and does not in any way infringe upon the authority of local officials.	(21) Inspection of rural-delivery roads (Mr. Vernon M. Peirce, chief engineer, in charge): Salaries..... \$600.00 Travel expenses..... 400.00 1,000.00	(21) Inspection of rural-delivery roads (Mr. Vernon M. Peirce, chief engineer, in charge): Salaries..... \$600.00 Travel expenses..... 400.00 1,000.00
(22) Photographic and lantern slide work (Mr. F. H. Brown, photographer, in charge): Salaries..... \$829.00 Miscellaneous expenses..... 1,406.37 2,235.37 This is not a project in itself, the photographs, lantern slides, bromide enlargements, and other illustrative work being used in connection with the lectures, papers, and general educational work of the office. It is deemed advisable, however, to state the expenditures as a separate item. A few other items that were expended in this connection were included in the preparation of the exhibit in this office, and were of such a character that they could not be paid by the regular exposition fund.	(22) Photographic and lantern slide work (Mr. Edward Block, photographer, in charge): Salaries..... \$1,000.00 Miscellaneous expenses..... 1,000.00 2,000.00	(22) Photographic and lantern slide work (Mr. Edward Block, photographer, in charge): Salaries..... \$1,000.00 Travel expenses..... 1,000.00 2,000.00
(23) Cooperation with experiment stations (Mr. Vernon M. Peirce, chief engineer, in charge): Salaries..... \$30.50 Travel expenses..... 132.22 162.78 In order to carry out the provisions of the appropriation bill directing cooperation with experimental stations, a representative of this office visited various stations to confer with the officials as to the best means for carrying out cooperative work.	(23) Cooperation with experiment stations (Mr. Vernon M. Peirce, chief engineer, in charge): (No expenditure during this fiscal year.)	(23) Cooperation with experiment stations (Mr. Vernon M. Peirce, chief engineer, in charge): (No expenditure during this fiscal year.)
(24) Cooperation with Forest Service (Mr. Vernon M. Peirce, chief engineer, in charge): Salaries..... \$984.00 Travel expenses..... 1,149.75 2,133.75 This project comprises cooperation with the Forest Service in devising and locating systems of roads and trails through National Forests.	(24) Cooperation with Forest Service (Mr. Vernon M. Peirce, chief engineer, in charge): (No expenditure during this fiscal year.)	(24) Cooperation with Forest Service (Mr. Vernon M. Peirce, chief engineer, in charge): (No expenditure during this fiscal year.)
Total of all appropriations for Office of Public Roads..... 87,390.00	Total of all appropriations for Office of Public Roads (an increase over 1909 of \$29,070)..... 116,460.00	Total amount estimated for Office of Public Roads (a decrease from 1910 of \$2,220)..... 114,240.00
Total expenditures to August 31, 1909..... 85,402.88		
Outstanding liabilities on August 31, 1909 (estimated)..... 1,703.97		
Balance to be turned back in Treasury (estimated)..... 283.15		



